

EPI And Polio Eradication Initiative Rapid Assessment Afghanistan March 2000

Rapid Assessment of the Polio Eradication Initiative in Afghanistan was carried out between the 25 February and 4 April 2000 with the support of UNICEF in close collaboration with WHO. A multi-disciplinary team of epidemiologists, anthropologists, communication, planning and management experts representing experienced staff of UNICEF, WHO, MOPH, NGOs, and UNDP carried out the exercise. The team was lead by Dr. Waqar Ajmal (Management and Public Health Specialist) who along with Mr. Aftab Jamal (Public Health Specialist) were two external independent consultants recruited by UNICEF for the assessment. Fieldwork was carried out from 6 to the 14 of March 2000 in five regions of the country. Since the methodology involved extensive consultations with the community all the major stakeholders of PEI/EPI took part in the exercise. The views expressed in the report are of independent consultants and team members, which may not necessarily reflect those of UNICEF or WHO.

Polio Eradication Initiative Rapid Assessment

March 2000

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I. Background

Almost twenty years of conflict and civil strife ravaged the infrastructure and the institutional framework of Afghanistan. The devastation affected all areas of socioeconomic development including the health sector and the EPI. The Afghan administration unable to afford even a minimum wage, most of the professional staff left to look for alternative sources of income or migrated to other countries. Under these circumstances the international community has been providing humanitarian assistance to help restore and maintain minimum health service to the population.

When the rest of the world was focussing on accelerating their national immunization programmes in the eighties Afghanistan was left out due to war. Up to 1993 immunization was only confined to the urban areas then controlled by the government. Rural areas were served by a cross border operation undertaken by the NGOs through a special cadre of vaccinators trained in Pakistan. A major donor-funding cutback in 1993 affected the continuation of the EPI services to the extent that the coverage of eligible population dropped to below 10%.

Efforts to restructure EPI started in 1994 when the first immunisation campaign was lodged. UNICEF and WHO with the collaboration of the Ministry of Public Health and the NGOs redesigned the programme strategy in 1995, and a regional system of EPI management was put in place. Since then a series of multi antigen mass immunization campaigns (5 from 1994-1996 and three accelerated EPI campaigns in 1997) have been implemented on a national scale.

Coordinated efforts have lead to extending the EPI services including the cold chain infrastructure to 80% of the country's 330 districts by the end of 1999. Studies were also carried out using different techniques and methods to measure performance and the effectiveness of the strategies being applied. These included amongst others: a Multiple Indicator Cluster Survey, a comprehensive EPI Review in 1998, and Coverage Evaluation Surveys, using WHO cluster sampling technique in 1998 and 1999.

As part of Polio Eradication initiative (PEI): a global resolve to eradicate polio by the end of year 2000, a four-year plan of action for polio eradication in Afghanistan was developed in 1997. A total of eight rounds of national immunization days (NIDs) have since been conducted, mainly focussing on delivering supplementary OPV to children under five years of age. Vitamin A supplementation was also provided in last four rounds. In addition several Sub NIDs have also been carried out in border and high-risk areas in collaboration with Pakistan and Iran.

The globally recommended strategies used for polio eradication initiative are: High NID Coverage (>90%), High routine immunization coverage (>80%), Surveillance and investigation of cases of acute flaccid paralysis and mopping up immunization in areas or amongst populations where poliovirus transmission persists.

Sentinel surveillance system was also established in 1997 to detect and follow up cases of acute flaccid paralysis (AFP), with laboratory support from the National Institute of Health in Pakistan. Currently 86 sentinel sites in 44 districts are operational. The system since 1997 has so far detected 405 cases of AFP of which 229 were confirmed wild poliovirus. In 1999 alone, 230 cases of AFP were detected, out of which 150 were confirmed as wild poliovirus.

II. Rationale and Objectives

Rationale:

Major gains have been made in the past few months towards the global commitment to eradicate polio by the end of year 2000. The count down to reach the deadline is ongoing with full force. Poliovirus has been eradicated or its transmission interrupted in all other areas except three main foci of which Afghanistan is a part. The three major foci of transmission remain, South Asia (Afghanistan, Pakistan, India), West Africa (mainly Nigeria) and Central Africa (mainly the Democratic Republic of Congo).

Although gains have been made in establishing a functional regional EPI management system, EPI in Afghanistan still remains far from attaining the desired coverage and consistency of routine service delivery. Afghanistan still remains along with Sudan, Somalia, Angola and Congo a country of reservoir (poliovirus) in conflict where polio is still endemic, thereby having the potential of transmitting poliovirus to countries from where it has already been eradicated. It is therefore obvious that failure to eradicate the virus from Afghanistan could jeopardize the progress of eradication achieved in these countries as indeed in the entire world. The urgent need of eradicating polio from Afghanistan therefore remains one of the top priorities of the global polio eradication initiative.

The existing low routine immunization coverage (31% 1999 reports and 47% survey for OPV3); a caseload of 405 cases of AFP of which 229 are confirmed wild poliovirus (from 86 sentinel sites in only 46 out of 330 districts), clearly indicates that the situation is still precarious and far from the ideal of achieving zero polio by the end of year 2000. With only eight to nine months remaining in the deadline to interrupt wild virus circulation in Afghanistan the existing situation indicates an urgent need for identifying gaps in the current strategies. In June, 1999 it was agreed by the stakeholders that following the four rounds of NIDs planned for the year, a joint assessment would be carried out to double check the effectiveness of the intervention strategies and identify remaining gaps to be filled.

For the above reasons the present assessment/review has been designed to meet the following purpose and specific objectives.

Purpose:

- To assess the effectiveness of the current strategy on Polio Eradication in Afghanistan especially the routine immunization component
- To reach a consensus amongst all stakeholders on appropriate way forward to achieve zero polio by the end of 2000
- To outline the steps needed to develop a composite EPI and PEI plan of action for the next 3 years - 2000-2002

Objectives:

- To conduct a desk review of existing information on polio eradication activities and routine EPI (routine reports, NID reports, previous reviews, surveys etc) in order to synthesize information into a single data base.
- To identify lessons learnt and determinants of successful implementation of NIDs, routine EPI and AFP surveillance to inform planning activities of spring NIDs and EPI plan of action 2000-2002
- To assess the effectiveness of the communication strategies for social mobilization and advocacy for polio eradication, routine EPI and surveillance.

III. Methodology

The Rapid Assessment Procedure (RAP) was applied to carry out the exercise. This involved a combination of quantitative and qualitative assessment through the review of documents, observations, interviews with key informants and focus group discussions.

The review was undertaken by a multi-disciplinary team of epidemiologists, anthropologists, communication, public health, planning and management experts representing experienced staff of the implementing and coordinating bodies of PEI/EPI like the MOPH, NGOs, UNICEF, WHO, and UNDP. The team was lead by an external independent consultant who was one of the two consultants recruited by UNICEF for the review. Since the methodology involved extensive consultations with the community all the major stakeholders of PEI/EPI took part in the exercise.

A desk review of the existing information on EPI and PEI was carried out by a team made up of WHO, UNICEF staff and two UNICEF consultants. This involved review of routine reports, NID reports, surveys, previous reviews and evaluations. WHO maintained PEI data while routine EPI information was compiled by UNICEF. The data was synthesized into a single database so that both the organizations had access to and could use information on both EPI and PEI activities. The synthesized information was used to assess the accuracy, regional coverage, yearly trends and a comparison of

reported and survey coverage. Regional reports were prepared and provided to the teams for use in the field.

From the main team five regional teams were constituted and a team each was fielded to five regions of the country. These included the Central region (Kabul and Ghazni), West and South regions (Herat and Kandahar), North and North East (Mazar Sharif and Badakhshan). In view of the urgency to move forward with program implementation a less extensive sample of the regions and sub national levels was visited compared to previous reviews. Priority was given to regions not included in the previous reviews; hard to reach areas and the central region being the country capital.

By design each team was made up of four members and included a gender balance within each team. Last moment unavailability of some team members resulted in a few shortages and the desired number of team members was not achieved in all the teams. Four out of five teams however ended up having a female member (see Appendix A for team compositions). Team members working in Afghanistan were sent to areas other than their own regions of work.

Fieldwork was carried out between the 6th and 14th of March. Extensive consultations, interviews and focus group discussions were held with a cross section of regional, provincial and district authorities, concerned agencies and the civil society. The teams were guided in their investigations by a checklist (attached as Appendix B), that provided consistency with the methodology and in report writing. Fieldwork included all the elements of polio eradication strategy that is the NIDS, routine EPI, AFP surveillance and mop-up activities. General Primary Health Care services were also looked into.

IV. Project Area

Afghanistan has a population of approximately 21 million living over an area of 652,200 square kilometers. The country is composed of seven administrative regions, 31 provinces and 332 districts with diverse cultural and political characteristics. Other than the provincial capitals population is overwhelmingly rural (80%), living in sparsely populated villages scattered over vast expanse of land. The terrain in the rural settings is usually mountainous, the infrastructure poor and extreme weather conditions especially during the winters render some of the remote areas difficult to access. North of Kabul, Kapisa and Parwan provinces hold the front line of the conflict. War displacement as well as seasonal migrations is common making planning and implementation of programs difficult in these areas.

The country is served by 23 regional, 35 provincial and 34 district hospitals, 220 Basic Health Centers, 132 Sub-Centers and 426 fixed EPI. Cold chain is now operational in almost 90% of the area. The above distribution obscures rather large areas, which remain either under served or unserved by health services in general and EPI services in particular. EPI and PEI activities are being managed by regional (REMT one per region) and provincial EPI management teams (PEMT one per province). An overwhelming number of health staff and vaccinators believe that a health facility or a fixed center can

only cover 1/4 of the area it is supposed to serve leaving 3/4 partially covered or uncovered.

The basic statistics for Afghanistan show extreme economic and social underdevelopment. With statistics like Infant Mortality rate of 165/1000 live births and under five mortality of 250/1000 live births, the 1996 Human Development Report places Afghanistan as 169th out of 175 countries in the International Human Development Index ranking (HDI). The morbidity pattern in the area is typical for an underdeveloped country in this part of the world and the most common five diseases are ARI, diarrhoea, Malaria, Malnutrition and Tuberculosis. Mortality follows a similar pattern. Communicable diseases like Measles, Diphtheria, Pertussis, Neonatal Tetanus, Tuberculosis and Polio accounts for 25% of mortality amongst children under five years of age. Polio is endemic in the country.

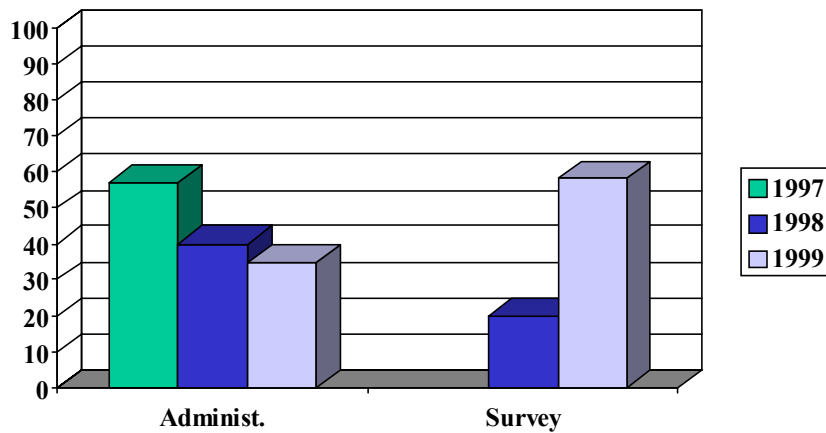
The 426 fixed EPI centers are staffed with 990 vaccinators of whom 165 are female. Most of the female vaccinators serve in cities, provincial capitals; their numbers in rural areas are insignificant. Female vaccinators do not carry out any outreach activities. Approximately 45-70% (regional variation) fixed centers conduct outreach providing a combination of 2 days a week static and 4 day outreach, the remaining provide static services only, which significantly reduces their catchment area. The percentage of clinics providing static services varies from area to area in direct proportion to the number of clinics staffed with female vaccinators, as such more centers in rural areas provide outreach. As a general rule a fixed center is staffed with 2 vaccinators however variations do exist, a case in point is the NGO Ibne-Sina following a three-vaccinator policy (one female and two males).

The target population of routine EPI activities and NIDs is 878443 and 4392217 being children 0-11 months of age or 4% of the total population and children aged 0-59 months (20%) respectively. The target population for CBAs is 4286929 or 18.68% (Target populations and coverage from desk review 2000 based on 1999 population Appendix C).

The routine EPI reported coverage for OPV3 (1999) to children under one year of age is 31% while the coverage survey shows 47%. Similarly for 99 spring NIDs the reported coverage in the first and second rounds is 92% and 98% respectively while the coverage surveys show 87% and 83%. TT2 reported coverage in 1999 is 17% as against the coverage survey figure of 56%.

It is interesting to note that the routine EPI coverage (both reported and survey) is very low in Northern and Southern regions (Appendix C Desk Review). These regions have had security problems and suspension of EPI activities for extended periods.

Comparison of Measles Coverage in 1997, 1998, and 1999
by Administrative Reporting and by Coverage Survey

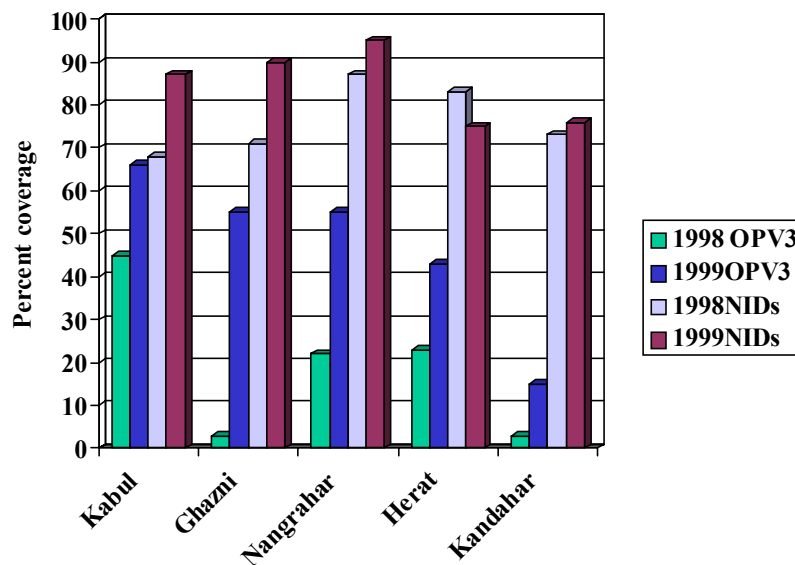


During the “Desktop” Review the available information on routine EPI coverage in Afghanistan was compiled, both from administrative reporting of 1997, 1998, and 1999 and from the coverage surveys of 1998 and 1999. The data was analyzed on the basis of each province, each region and overall. In addition, the disease reporting from the sentinel sites was divided analyzed by each province. These tables and charts can be found in the annex.

As noted in the chart on measles coverage above, comparison of the years by administrative reporting shows an overall decline in coverage from 1997 to 1999. While decline in 1998 was expected due to political inaccessibility of six northern provinces, the decline in 1999 most likely represents incomplete data, as some regions have only submitted data for 3 quarters in 1999 up to the time of this report. This assumption is supported by the results of the coverage surveys which indicate an improvement from 1998 to 1999 in coverage of the provinces surveyed. It must be noted however that the coverage surveys were conducted in five provinces while the administrative reporting is calculated for the whole country.

Finally, the overall inadequate coverage can be appreciated by the reports from sentinel sites of over 3600 cases of measles in 1999 and the reported outbreaks in the winter of 1999-2000 killing almost 1000 children.

Comparison of OPV3 Coverage and NIDs Coverage according to Cluster Surveys in 1998-1999 in Five “Best Performing” Provinces of Afghanistan



The coverage surveys in 1998 and 1999 were conducted essentially in five provinces which are relatively better served than other provinces because they are the seats of the regional governments. Comparing the results of the coverage survey in almost all of the provinces shows a clear improvement both in routine EPI and in the NIDs coverage.

While this provides some optimism about the direction of EPI in Afghanistan, the following caveats should be considered:

1. The urban acceleration of routine EPI in the Spring of 1999 likely contributed to the improved coverage but, though registration of children was also improved in some areas, the achievement of coverage may not be sustainable.
2. The target for OPV3 (as an example of routine EPI) is 80% of children under age one while the target for NIDs is 90% of children under age five. None of these “best-performing” provinces reached the target for routine EPI while only three of them reached the target for NIDs coverage.
3. These coverage figures cannot be averaged across Afghanistan; actually the overall coverage must be much lower as there is not universal access to immunization in Afghanistan.

Please see the annex for detailed province-wise coverage information about all the routine EPI antigens and NIDs, both administrative and survey reports, and the reported cases of polio, measles and neonatal tetanus from each province.

Although the above figures provide interesting comparisons the data has to be interpreted with caution as the reported data is based on projected population figures, which may be under or over estimations of the actual populations in different areas. In routine reporting there are inaccurate age estimations and incorrect recordings. More over survey results represent coverage levels of a different time zone.

Out of the 220-planned sentinel AFP sites for 130 districts only 86 have been put in place in 44 districts since 1997, and are currently functional. The system since 1997 has so far detected 405 cases of AFP of which 229 were confirmed wild poliovirus. In 1999 alone, 230 cases of AFP were detected, out of which 150 were confirmed as wild poliovirus.

V. Review of Implementation

Afghanistan has been in a complex emergency situation since 1979. This has resulted in destruction and complete breakdown of the infrastructure in every sector including health. Efforts to strengthen the health services and restructure the EPI began in 1994, when first mass immunization campaign was launched.

With concerted efforts by WHO, UNICEF, NGOs and the MOPH the programme strategy for EPI was redesigned in 1995 and a regional system of EPI management was put in place (Appendix D EPI Organogram). As part of Polio Eradication initiative (PEI): a global resolve to eradicate polio by the end of year 2000, a four-year plan of action for polio eradication in Afghanistan was developed in 1997. A sentinel system of AFP surveillance was also started in 1997.

Since 1994 a series of multi antigen mass immunization campaigns (5 from 1994-1996 and three accelerated EPI campaigns in 1997) have been implemented on a national scale. A total of eight rounds of national immunization days (NIDs) have since been conducted, mainly focussing on delivering supplementary OPV to children under five years of age. Vitamin A supplementation was also provided in last four rounds. In addition several Sub NIDs have also been carried out in border and high-risk areas in collaboration with Pakistan and Iran.

Despite major efforts in the past five years to revitalize EPI management structure, at present the EPI programme in Afghanistan is in a state of development achieved by most countries in the mid eighties.

Polio Eradication is an inextricable part of EPI services; similarly the EPI is an integral part of the Primary Health Care Services. As these components have a strong bearing on one another a discussion on the management and performance of any of these areas is incomplete without reference to other.

Opening Remark

(The mission fully acknowledges the invaluable contributions made by the REMTs PEMTs and the supporting agencies who made remarkable achievements under most difficult conditions. The observations that follow reflect the situation on ground and have been made to facilitate these agencies to reach their objectives).

The findings of the mission on various aspects of PEI and EPI services are discussed below under the following headings:

A. Policy, Strategy, Implementing Agencies and Planning

There is little knowledge regarding the policy on provision of health care in general. There is however an implicit strategy inherited from the past era which identifies type of health facilities based on the criteria of administrative subdivisions and population. These follow an ascending pyramidal pattern more on line of Primary Health Care Services at the lower levels to provincial and regional hospitals at the higher. The clarity and thus commitment to this strategy was more in the mind of technical people and very little in political sectors.

Although there is knowledge about the number and types of health facilities at various levels, appropriate staffing, job descriptions etc, it is not translated into practice. Large areas remain under served or not served because of lack of health facilities, lack of staff or operational inadequacies. Health facilities or fixed centers even if existing in a district can only effectively cover 1/4 of their catchment area the rest remains partially covered or uncovered.

The lack of policy and the practical application of an appropriate strategy have clearly compromised the role of MOPH, the country's main instrument to provide and coordinate health care. Weakness of the MOPH is also a consequence of financial constraints and a dearth of qualified staff.

The resource base of the MOPH is extremely weak. Considering other issues of immense importance to the government in the wake of economic and security hardships, the policy and verbal commitment of the government is not matched by corresponding allocation of financial resources for health. The funds for EPI/PEI almost entirely come from supporting UN agencies mainly from UNICEF and WHO with some contributions from the NGO community. This has negative implications on the ownership of the programme by the government and thus its integration with other services and sustainability.

Considering the vacuum in the provision of health care, the NGOs have been providing invaluable services. The mission came across different types of NGOs. Some of them practicing innovative approaches like involving the communities in the delivery of sound Primary Health Care, cost recovery schemes etc; others had limited capacity. While NGOs are appreciative of the lead role that the UN agencies should have, there is a

growing feeling amongst some of the NGOs that their status as equal partners with the support agencies and other stakeholders is not matched by their involvement in the various stages of the programme cycle. Their access to and communication with the support agencies is not easy and their involvement in the planning of various activities is limited.

MOPH want better collaboration with NGOs but have reservations about their acceptance by some of the NGOs. Although some NGOs see the importance of an effective MOPH large majority talks of its shopping list and obstructive attitude, ineffectiveness and limited assistance in the provision of health care. There thus is dearth of an open arm policy towards MOPH in such circles.

The commitment of some of the NGOs for rural areas is not reflected in their presence in the far-flung areas. There is over crowding of NGOs in the country/provincial capitals, and a tendency to focus more in urban areas and city centers. Indeed the reluctance of most of the NGOs to provide salaries for the vaccinators in particular and share the financial resources for the EPI program in general, conducted through their clinics does not reflect well on the level of their commitment.

The ministry of health is cognizant of the need for a health policy and an effective MOPH. The mission was assured that the ministry is working on the issue and will soon come up with a suitable policy. Policy/strategy variations have been noted amongst various NGOs. Standardization between NGOs and with MOPH needs improvement.

The EPI services are the weakest link in the delivery of PHC services as an integrated package. This is especially the case in areas where EPI fixed centers are located outside health clinics. Where fixed centers are located within NGO clinics parallel channels of technical supervision and provision of vaccinator salaries pose problems for administrative integration. The EPI services stand isolated from the activities of the health facilities. The vaccinator does not feel obliged to communicate or interact with the head of the clinic or the health workers. He/She do not feel accountable to the clinic as he gets his instructions, supplies and incentive directly from the REMT. Efforts by the MOPH to bring about such integration have been noted but need further improvements.

The policy on EPI and PEI activities is clear and being uniformly implemented, thanks to the special focus on this area. All children under five years (0-59 months) of age are immunized for polio during NIDs while all children under one year (0-11 months) are immunized with multiple antigens during routine EPI activities. In addition children less than two years of age (0-23 months) with no history of immunization are also immunized with multiple antigens during routine immunizations.

The strategies followed to achieve the policy objectives for EPI and PEI are to provide routine immunizations through EPI fixed centers. As a policy at least one fixed center is to be provided per district and with equitable distribution within districts should the number be more than one in a district. However in practice the distribution of centers is not equitable most of the centers cluster in urban areas, remote locations within a district

and indeed some districts remain uncovered by fixed centers. Planning, supplies, technical supervision and management of EPI and PEI activities are carried out by the regional EPI management systems that include the REMTs and PEMTs.

Although regional variations are there large proportion of fixed centers in the rural areas provide a combination of static services (2 days/week) and outreach (4 days/week). Mostly static services are provided in urban areas in clinics staffed with female vaccinators only or in clinics with transport problems. As a general estimate approximately 45-70% fixed centers provide a combination of static and outreach services. Needless to say the geographical coverage is severely compromised without outreach. Female vaccinators provide static services only. An NGO Ibne-Sina has of recent started providing a combination of static, outreach and mobile services through its fixed centers.

A combination of high NID coverage (>90%), high routine EPI coverage (>80%), AFP surveillance and an appropriate mopping up response are the strategies pursued to eradicate polio.

Planning documents with UNICEF and WHO are well broken into activities but fall short of monitoring indicators. REMTs, PEMTs and the fixed centers plan their yearly targets (work plans) for routine EPI on the basis of projected population estimates, these are further broken down into monthly targets for the clinic levels. However at the clinic level maps are not used to identify the location of EPI target population in the catchment area for planning purpose. The population figures used are based on projections of 1973 census and may be over or underestimates of the actual population.

There is a clear lack of district based planning for EPI. Planning and monitoring charts are not in use in most of the field. The planning process is top down and there is little or no involvement of other stakeholders; NGOs and the community respectively in the exercise. It seems that the REMTs in general lack the capacity for effective planning and are reliant on UNICEF for the preparation of plans. On the other hand NID planning involves district coordinators and selected paid community members.

The planning process of the NIDs includes micro planning at the district level, ensuring mobilization and involvement of the community through paid community workers. This has resulted in high coverage in most of the areas. However there were reports that areas and community segments are still being missed possibly due to inequitable involvement of the community leadership and structures in the planning process. Inadequacy and delays of vaccines, other supplies like social mobilization materials and finances have also been a source of problems in the NID campaigns reflecting shortcomings in planning. Weak involvement of NGOs in the planning process of NIDs and limited use of various cadres of their health workers especially those at the community level TBAs, CHWs is seen as another weak area.

Days of tranquility during NIDs are not universally observed thus limiting coverage in such areas.

B. Human Resources and Training

Job titles and standard structures for EPI/PEI (REMT, PEMT, Fixed Centers, District Coordinators, Vaccinators, Social Mobilizers, Volunteers) are known and clearly established. Job descriptions have however not been developed. As such while the general roles are known there is some times an overlap or misunderstandings about roles and responsibilities at operational levels.

In urban areas especially the country capital and provincial capitals the gender balance amongst employed vaccinators is not bad as in some areas females make 30% of the total numbers. However this disguises the rather non-existent gender balance when it comes to urban and rural areas. Most of the females work in urban areas and large towns; their presence in remote rural areas is negligible. Most clinics staffed with females have no male vaccinators.

Qualifications and experience criteria are not uniformly applied in selection of staff for key positions of REMTs and PEMTs. The mission came across PEMT managers with no medical/paramedical background or experience as such with limited skills to manage EPI/PEI. Other staff has to make up for the lack of expertise amongst such senior but unqualified or inexperienced REMT/PEMT staff, which obviously overloads them, making it difficult for them to carry out their own responsibilities. Rapid staff turnover further complicates the issue.

UNICEF provides a monthly incentive to the vaccinators in the EPI/PEI activities. The incentive is not performance based and tops up the salary paid by the MOPH. The payment of salary by the MOPH has mostly been irregular and inadequate. As such there were general complaints of the inadequacy of the monthly emoluments. The net earning a vaccinator ends up with is less than the minimum living wage. Not being able to earn even a minimum living wage and faced with an uncertain future qualified Afghans have left for more secure and greener pastures. Thus qualified and experienced locals may not be available especially in remote areas. Political allegiances and patronage further complicate the issue and people chosen especially at senior levels may not be the best qualified for the positions. Staff turnover for the above reason is another main impediment to efficient institutional performance.

UNICEF has two full time international EPI positions at the national level. At the field level there are 15 national health officers devoting 50% of their time to EPI and 5 EPI consultants. Although facing difficulties in identifying appropriately qualified staff willing to serve in remote and weak areas UNICEF has been able to fill up positions that were previously vacant. In this respect priority was given to areas where EPI/PEI activities were weak. The currently vacant positions of one international EPI officer and one national officer are expected to be filled soon.

The UNICEF office in Qandahar has been substantially weak (only one Supply Assistant responsible for its entire operations). The authorities, in particular the Ministry of Public Health (the direct counterpart agency) expressed serious concerns regarding the absence

of support from UNICEF in the region. UNICEF has however taken action and posted two full time national officers and an international staff member who is about to report to the duty station as the head of the office.

The WHO offices in different regions are staffed with adequate staff to handle the quantum of work as one of the main supporting agencies although there has been under staffing in the previous years. During the assessment the capacity of the WHO office in Mazar was reportedly weak. WHO now has a full time EPI staff in every sub-office and as part of its emphasis on immunization activities plans to have a WHO EPI staff in all the 30 provinces in the near future. In addition 5 internationals are being recruited by WHO to strengthen its staff in Afghanistan.

Both UNICEF and WHO lack appropriately qualified and full time staff to maintain a database on EPI/PEI.

Most of the male vaccinators have been inherited from amongst the workers of small pox era. An estimated 10% of the vaccinators are illiterate. Basic training of vaccinators is usually done by NGOs with different curricula; this coupled with experience in EPI program forms the basis of their selection as vaccinators. Training/experience aspect is clearly weak for female vaccinators who are only provided on the job minimum training. A WHO assisted refresher training of the vaccinators was ongoing in some regions at the time of the mission and was satisfactory.

Master trainers have been trained in appropriate numbers. Training material has been developed and translated into Dari and Pushto for all categories involved in the programme. WHO has a well thought out and documented training plan. Key people have been identified and sent for higher training overseas however mid-level managers training has not been provided to any of the REMT, PEMT managers. There is inadequate guidance to the REMT to acquire the skills in financial management or to plan, supervise, monitor and develop management tools for effective supervision and data analysis in program implementation.

C. Coordination

National and regional coordination mechanisms are in place for health services. The Technical Coordination Committee provides the coordination at national level while at regional level Technical Working Groups or Health Coordination Committees provide these services. Mechanisms to provide overall intersectoral/interagency coordination are also in place in different regions of the country in the shape of Regional Coordination Bodies.

The TCC is a national forum and includes all the implementing and supporting partners (MOPH, NGOs and the UN agencies) meets every month. Earlier meetings were held in Pakistan, the venue has recently been moved to Kabul. While the principle of moving the venue of TCC to Kabul is appreciated, since the move the TCC has lost national level agenda and participation and the meetings have become more Kabul specific. Lack of

participation of senior decision making staff from the supporting agencies (UNICEF/WHO) who are located in Pakistan, has limited the national character of the TCC as well as its decision making ability. The agenda of these meetings encompasses all areas of health of which EPI/PEI are a part.

The Technical Working Groups or health coordination committee provides regional forums for health coordination. These forums include the NGOs, the main supporting UN agencies and the MOPH. Interestingly and most surprisingly in the central region the health coordination committee does not include the country's main instrument of health care delivery, the MOPH. The meetings in these forums are held at regular monthly intervals and all aspects of health care including EPI/PEI are discussed. Usually issues are taken up reports (targets, coverage) are seldom discussed as such little flows back to the field as feedback on performance and situation. The chair of the meeting and its venue in some regions keeps on rotating amongst different partners this as well as the exclusion of the MOPH (central region), in the view of the mission compromises responsibility, institutional memory, and follow up.

Interagency coordination at the regional level (in all sectors) is provided by the regional coordination bodies, these include all the UN agencies and the NGOs. PEI/EPI is seldom discussed in these forums.

Coordination meetings are held at regional level prior to NIDs. Other technical departments and NGOs both local and national are invited. NGOs however feel little motivation to attend these meetings as they feel that the communication is one way, little feedback is provided to them on the outcome of proposed actions and NIDs. Minutes of the meetings are rarely shared and there is little follow up. NGOs also reported not having sufficient lead-time to better prepare and plan for NIDs, activities are usually carried out in a rush.

Despite existence of appropriate instruments, planning and implementation of EPI/PEI activities is not very well coordinated between different stakeholders. While good cooperation and working relationships exist at the national level between the two main supporting agencies: UNICEF and WHO, the same may not be true for all regions in the field. In some regions there is lack of clarity about roles between the staff of these agencies and the two agencies seem to be competing rather than complimenting one another.

Little discussion of PEI in the heads of the agencies meeting at the higher level and weak participation of NGOs in planning activities of EPI/PEI at the field level despite being a part of the REMTs are other cases that point weaknesses in coordination. Some agencies UN/NGOs deliver development assistance involving communities (village organizations) such community infrastructure can be utilized for better organizing PEI/EPI, this potential has not yet been tapped. Considering the nature of the virus (enterovirus) and its transmission more emphasis is required on health education, latrines, and safe drinking water. Coordination with other agencies involved in environmental sanitation is weak.

Further more UNHCR is involved in a large-scale repatriation exercise for returning refugees, and in provision of assistance to internally displaced people. Amongst the refugees alone the agency deals with approximately 22000 children of the target group of PEI every year. The approximate numbers for CBAs and under one year children can be worked out considering that average numbers being repatriated are around 100000 annually. As yet no EPI/PEI activities have been coordinated with UNHCR.

Some coordination of EPI activities exists up to the province levels and is provided by the REMTs and PEMTS. District level coordination is clearly lacking for EPI. On the other hand PEI activities are well coordinated at all levels including the district. However as of recent WHO/UNICEF have increased efforts through additional staff deployment to improve district and provincial level coordination for EPI.

Intersectoral coordination and collaboration to include other relevant government departments is missing in the programme for EPI/PEI at all levels. Coordinating instruments are not used to tap the assistance that can be provided by ministries like education, culture etc.

D. Management and Organization of Work

EPI/PEI activities are managed by the regional EPI management structure (REMT, PEMT) and implemented through Vaccinators. The District Coordinators play a crucial role in NID management. NIDs are implemented by the vaccinators, social mobilizers and paid community members (volunteers).

REMTs hold regular monthly meetings with PEMTs. In these meetings the monthly targets and achievements are discussed besides any other problem issue relating to EPI/PEI. Minutes of the meetings are recorded but not always distributed amongst the participants. Weak areas of management include the preoccupation of REMTs with administration and logistics and that of the PEMTs with the cold chain.

District level concept of management is missing. There are no EPI meetings between the PEMTs and the vaccinators at the district level or between the staff of the clinics and the vaccinators. Generally heads of the clinic have little or no EPI training. They are not familiar with the activity and lack the knowledge and skills to monitor its performance. Nevertheless, many of them were trained and prepared to contribute in the NIDs.

The salaries of REMTs mainly being paid by UNICEF, the team feels divided between the MOPH and UNICEF. In fact, the team gives the impression that they implement the EPI for UNICEF on behalf of the MOPH. There is a lack of ownership by the REMTS and little or no delegation of financial powers to them, which together with problems of inadequate capacity explains the lack of initiative and the dependency on UNICEF to plan, monitor and solve the problems of implementation. Since 1996 the EPI structure and the salaries provided have not been revised.

All vaccinators are paid by the MOPH and their salaries are topped up with UNICEF funds. A good number of these vaccinators operate through the fixed centers located in NGO clinics. Being paid and supervised by the MOPH administrative integration of their services with the rest of the NGO staff is problematic. The mission noted attempts made both by the MOPH and the NGOs to affect better integration.

At the fixed centers work is managed through established routines either static or outreach. Centers providing static services have limited catchment population. Fixed centers providing outreach services operate on the basis of four days of outreach and two days of static clinic immunizations. During outreach both vaccinators' work out of the clinic together, leaving no one to provide immunizations in the clinic for four days. This results in substantial missed opportunities as other staff does not provide cover. The mission was not convinced by the necessity of two vaccinators doing outreach together. On the other hand the joint outreach strategy reduces the total area that could be covered if outreach activities were carried out in different directions by each of the vaccinators.

The NGO Ibne-Sina has recently employed a female vaccinator to provide static immunization service at the fixed centers. This is in addition to two male vaccinators who provide six days a week outreach and where required mobile service. The mission is not sure about the strategy from the affordability point of view however it has substantially increased the coverage in the areas served by this NGO.

E. Monitoring and Supervision

The programme is monitored by the regular monthly meetings between the REMTs and PEMTS as well as by the visits of their staff to the lower levels. In the meetings progress against planned targets is discussed. Similar assessments on progress are made during field visits. Monitoring tools (charts) have been designed and are being used by the REMTs, however they are not yet in use at the PEMT or the fixed center level in some regions.

Disease surveillance is not used as a programme-monitoring tool. Progress monitoring is based on achievements of targets, which are in turn based on projected populations that may not be reliable in a community exposed to many displacements. The monitoring mechanisms only assess quantitative aspects of the programme missing out on qualitative aspects like disease surveillance, age appropriate immunizations, number of defaulters and dropouts.

Supervisory visits to the fixed centers are undertaken at least once a month in principle however in some areas a fixed center may not be visited for up to three months. Usually monthly visits coincide with the time of collection of reports or salary distribution. More than one visit to a fixed center is made in the wake of a problem or other needs. The mission however noted a paradox, as remote areas which are more likely to have problems get visited less for supervisory purposes. Monthly visits may not be possible to some fixed centers during extreme weather or at times of active conflict. The supervisory staff attributed supervision difficulties to the inadequacy of the transport provided.

Supervision certainly came out as a weak area. The preoccupation of REMTs with administration/logistics and that of PEMTs with cold chain lead to the supervisory aspects not getting a high priority. With infrequent visits for one reason or the other on the job training as part of the supervision suffers. In some areas there are reports that vaccinators only work for a couple of hours a day or do not carry out planned outreach activities without being detected by their supervisors for extended periods. On the other hand weak supervision and motivation by the supervisors is a cause of low morale amongst the staff at the lower levels.

The heads of the health clinics are not well acquainted with the EPI program. They do not feel comfortable to talk about the EPI as they have little knowledge about the EPI and its services in their catchment area. The EPI is deprived, due to this isolation, of permanent and closer supervision and support.

Supervisory schedule is usually unavailable with the REMTs and PEMTs, a supervisory checklist has been developed and is being used. Feed back of supervisory visits is not provided in writing to the vaccinators however observations if any are sometimes noted on relevant documents in fixed centers.

There is no district level monitoring , coordination or planning system except for NIDS. Supervision was problematic in the fall NIDs 1999 in the central region, when NIDs were implemented with a new strategy that involved 2 volunteers and a social mobilizer from each village. Weak logistics especially transport arrangements contribute to supervision difficulties during NIDs. Lack of community involvement in EPI and inadequate use of community structures in the NIDs deprives EPI and NIDs of the monitoring that could be provided by the community. Post NID evaluations by REMT and PEMTs are still awaited in some regions. They are generally irregular and not on time.

F. Reporting and Disease Surveillance

A health information system is currently being introduced in Afghanistan. Reporting system on EPI/PEI is well established. Monthly EPI reports from the field are collected by the PEMT members and consolidated at the REMT level. Usually monthly returns are received at the regional level with undue delay; around the end of second week or the beginning of third week of the next month. They are consolidated at REMT around the end of the third week of a month. The monthly meetings at the REMT discuss reports of the previous month thereby compromising the use of reports to take timely corrective actions. The mission could not find a justification for such a long delay in providing field reports to the regional level.

REMT provides routine EPI reports to UNICEF Kabul on quarterly basis. These reports are usually received by the middle of the next quarter and take a further week or 10 days to be dispatched to UNICEF ACO, Islamabad.

Reports received from the various regions are fed into the data base maintained in UNICEF ACO, Islamabad and WHO ACO, Islamabad on routine EPI and NIDs respectively. Although both organizations are involved in the polio eradication initiative NID data is only available with WHO and similarly the routine data only with UNICEF.

The denominator used in EPI reports is projections made on the 1973 census (UNIDATA) which may not be accurate estimates (considering a community exposed to many displacements) and therefore results in over or under estimation of coverage in some localities. Besides the recording at the field level needs improvement, there are inaccurate age estimations and at times incorrect recordings. A case in point to illustrate the inaccuracy of reports and their limited use is that reports of some areas had higher number of doses administered than the number of doses supplied. No written observation is recorded or provided to MOPH in this respect by UNICEF. Nevertheless along with the coverage surveys the reports provide one of the two most important yardsticks of measuring program progress and are therefore invaluable.

AFP surveillance started in Afghanistan since 1997. Against the 220 sentinel sites then planned for 130 districts, so far 86 have been put in place in 44 districts. These sites are fully functional. The location and distribution of the operational sites has so been done to allow coverage to the maximum possible area (see appendix E). The system since 1997 has so far detected 405 cases of AFP of which 229 were confirmed wild poliovirus. In 1999 alone, 230 cases of AFP were detected, out of which 150 were confirmed as wild poliovirus. Case reporting and detection is incentive based and sentinel sites are fed by a number of hospitals, health centers etc.

Considering two stool samples within 15 days of the onset of symptoms have to be taken as part of the investigation, delays in reporting due to long distances can effect case detection, geographical coverage is therefore of importance. Although the operational sites are functioning efficiently, in view of the immense importance of AFP surveillance in measuring program effectiveness and identifying polio foci, the mission feels the progress on the number of AFP sentinel sites has been extremely slow. It was however noted that WHO is speeding up the progress on the numbers of sentinel sites as a matter of highest priority. It is hoped that by the end of the year every province will have an AFP site and most of the planned districts will be covered.

The mission noted that the AFP surveillance system does not use community surveillance and reporting by the vaccinators. Since the vaccinators cover significant areas during their outreach they could be instrumental in improving case detection by reporting suspected cases.

General morbidity returns and EPI target disease reporting is not regular from certain areas. The reports are seldom analyzed and used for action. The regional EPI management system is not involved in using target disease reporting/surveillance as a program-monitoring indicator.

Interviews with community members and the health staff revealed that EPI cards are not a priority with the family.

G. Cold Chain and Logistics

Cold Chain infrastructure is established and equipment is in place in sufficient quantities at all levels of EPI/PEI operations in over 80% of the country. The condition of the cold rooms especially in the provincial levels is poor. Lack of regular power supply at the regional level means more reliance on generators and therefore more fuel costs. There is inadequacy of funds to run generators especially at the provincial level, vaccine stay at provincial cold rooms is therefore reduced. Vaccines are supplied on a monthly basis from the regional cold rooms to the fixed centers with at best a day or two at provincial cold rooms.

Temperature records are being maintained at all levels and stock management is satisfactory. An open vial policy is being followed in the field.

The refrigerating compartment of Sibir Kerosene refrigerators supplied to the fixed centers stops functioning in summers when the temperature exceeds 20 degrees centigrade. Under these conditions the vaccine is stored in iceboxes kept cool by ice produced in the freezing compartment.

The cold chain technicians handle minor repairs of the refrigerators which are quite frequent. There is no expertise available to handle main faults. Experimentation with other type (solar) has not yet been done.

There is a general complaint of transport inadequacy. Considering the vast areas that the REMTs and the PEMTs have to cover the mission feels that the transport needs should be reassessed. Clearly in some of the regions visited transport inadequacy was one of the reasons for inadequate supervision. Availability and suitability of transport for EPI and NID activities is especially a problem in remote areas. At the fixed center level the cycles provided are not a suitable means of transportation in some hilly remote areas. There is a need of alternate arrangement of transportation for such localities. Availability of funds for animal hire can address this aspect significantly.

H. Service Delivery

The vaccination sessions are not used as opportunities to promote the demand for the services or to eliminate the wrong beliefs related to the immunization. The vaccinator's weakly handled giving general awareness about immunizations and proper explanation of immunization schedule to the clients. By comparison the aspect was clearly weaker amongst the female vaccinators. This could be one of the main causes of high dropouts (non-compliance to immunization schedule) and problems with age appropriate immunizations. Adequate stress was also not given about the importance of retaining immunization cards. Women overwhelmingly preferred being immunized against tetanus by female vaccinators where they were available.

Vaccines were generally properly reconstituted with appropriate diluents in all areas. However there is a considerable variation in the vaccinator's performance within a region and from one region to the other indicating the need for standard refresher training and improvement in monitoring and supervision.

Injection practices were safe and waste disposal appropriate; incinerator boxes were in use for the purpose in the central region. This was clearly not the case in the northern region and Qandahar. Syringes are held with no cover threatening to injure the attendant or the vaccinator and transmitting high-risk diseases. The quality of the vaccinators' performance in the rural areas indicated inadequate skills to administer the immunization. MSF, for example, stopped the outreach activities in their clinics, as the quality was too poor to justify the continuity. Vaccines are left outside the cold boxes for long time despite the instructions of the REMT to keep in a sponge pad inside the boxes. It was observed that sponges are provided only to some vaccination teams in the northern region.

I. Social mobilization, awareness and Community Participation in PEI/EPI

Communities are educated about and mobilized for EPI/PEI activities through outreach and health education sessions; usually megaphones are used for the purpose in routine EPI while other material and activities are added in NIDs. Media like local radio and papers (in urban areas) also contribute significantly in this area. This is however done in an ad hoc way a proper social mobilization strategy and a plan is clearly missing for routine EPI.

Social mobilization and health education are much more rigorous for NIDs. The community is involved in the exercise by acquiring the services of paid community workers (inappropriately named as volunteers) and social mobilizers in all areas. There is intense campaigning through the radio and newspapers. Megaphones, pamphlets, banners, flags and street parades are used. All segments of the population especially in the far-flung remote areas may not however be involved equitably or have access to most of the channels of communication except radio. Religious restrictions do not permit use of symbols and pictures.

Staff techniques in social mobilization are very basic and need improvement. There is limited use of the local available communication channels (Schools and mosques). Community leadership and structures like the local shooras various interest groups are not used at all for routine activities and to a limited extent in NIDs. Existing social mobilization efforts target directly the men and not the women.

Community services are inexpensive, sustainable and most affective ways of mobilizing communities, improving their level of health education and increasing programme coverage many folds. There is no involvement of the community in planning and implementation of routine EPI activities. Low level of awareness about immunization/age appropriate immunization is one of the main factors in low program coverage; lack of

community involvement is one of the main contributory factors in this respect. Some of the implementing partners like Ibne-Sina, and IFRC are using volunteer community services integrated in their health set up through a few paid community representatives and community health committees for promoting PHC in general including EPI/PEI. Since the start of these services their program coverage has improved significantly.

Intense social mobilisation and community involvement in NIDs has improved awareness regarding routine immunizations in general. Community knowledge about age appropriate immunizations is very weak, this results in dropouts, missed opportunities and low programme coverage. Communities are disenchanted with the inadequacy of the basic curative services, regarding it as an impediment to promoting preventive health care including EPI. There is a clear preference for females to administer TT immunization however there is acceptance for male vaccinators if female vaccinators are not available.

J. National Immunization Days (NIDs)

NIDs have had a positive effect in raising awareness about the polio immunization in particular and routine EPI in general was the overwhelming view of most of the stake holders especially the community. The number of children coming to the fixed centers increased for routine immunizations after the NIDs. During the last set of NIDs 325 out of a total of 330 districts were reached.

The planning process of the NIDs includes micro planning at the district level, ensuring mobilization and involvement of the community through paid community workers. This has resulted in high coverage in most of the areas. However there were reports that areas and community segments are still being missed possibly due to inequitable involvement of the community leadership and structures and less than required use of the community channels for communication (mosques, schools) in the planning process. Inadequacy and delays of vaccines, other supplies like social mobilization materials and finances have also been a source of problems in NID campaigns resulting in a reduced impact. Female participation in NID activities both in planning and implementation stages has been very limited. Weak involvement of NGOs in the planning process of NIDs and limited use of various cadres of their health workers especially those at the community level TBAs, CHWs is seen as another weak area in the planning process of NIDs.

Geographical coverage of NIDs has not been 100% and quite a few areas have not been covered due to a combination of factors like remoteness, conflict, or gaps in planning. Days of tranquility have not been universally observed, the agreements at the higher levels were not communicated to lower level commanders with the result that some areas could not be covered by NIDs for security reasons.

It is incorrect to say that routine activities suffer because of the involvement of staff in NIDs. It was observed that the vaccinator's time spent in NIDs is insignificant. The REMTs and PEMTs along with UNICEF and WHO staff, however remain occupied for at least two months during a set of NIDs. Considering the emergency situation two rounds of NIDs during a year seem quite justifiable. Mopping up activities have also been

continuing and several Sub NIDs have been carried out as dictated by the prevalence of wild poliovirus in different areas. The mission feels that mopping up in the areas identified should continue in addition to the two sets of NIDs every year.

NIDs have been implemented using the cluster methodology all over the country but in fall 1999 a new strategy that involved selecting two volunteers and a social mobilizer from each village was implemented in the central region alone. While implementing agencies in the central region claim successes in the later strategy there have been supervision problems associated with this approach. Interestingly the number of second doses dropped in comparison to the number of first doses during the round implemented with the new strategy.

In order to be effective NIDs should be conducted during low transmission season. The season of low transmission in Afghanistan starts from late October and lasts till end March. Another requirement for successful NIDs is to reach the entire or the maximum population of the country where it is being implemented at the same time. Extreme weather conditions impede access to large areas in Afghanistan during the peak low transmission period. NID rounds are being carried out in April/May and October to allow as much proximity to the low transmission period as possible without sacrificing large areas and population segments.

Training and supervision aspects of NIDs could further be strengthened. NID training does not focus on promoting awareness regarding routine EPI, which is an integral part of the polio eradication strategy. Community structures and notables are not involved in supervision of NID activities.

VI. Principal Issues Affecting Implementation/ (Constraints)

Inadequate geographical coverage in vast areas for routine EPI mainly, but also to a significant extent for NIDs. This is a function of either lack of health facilities/fixed centers in some areas or inadequacies in numbers and poor operational ability. On an area or population basis these facilities are allocated for areas or populations much larger than they can cover. The health facilities /fixed centers can at best provide effective services for only 35% of the area they are meant to cover with the available human and material resources. Lack of appropriate policy, strategy and planning, rough terrain, difficult security and extreme weather (in some areas) besides deficient human and insufficient material resources are some of the contributory factors.

The resource base of the MOPH is extremely weak. Considering other issues of immense importance to the government in the wake of economic and security hardships, the policy and verbal commitment of the government is not matched by corresponding allocation of financial resources for health. The funds for EPI/PEI almost entirely come from supporting UN agencies mainly from UNICEF and WHO with some contributions from the NGO community. This has negative implications on the ownership of the programme by the government and thus its integration with other services and sustainability.

Compared to the colossal task of reaching vast uncovered areas the sufficiency of available funds for routine EPI with UNICEF is doubtful.

Weaknesses of the MOPH are also reflected in its inability to perform as an effective coordinating instrument besides others factors (mentioned below) lack of policy and strategic framework plays a crucial role in this respect.

Coordination instruments are not used to tap all potential resources both within the health sector as well as other sectors. Coordination between different stakeholders is weak especially at the district level. Intersectoral collaboration is missing from the program.

The polio eradication strategy being followed is tilted much more towards NIDs rather than equal emphasis on NIDs, routine EPI, AFP surveillance and mopping up strategies. Achievements of routine EPI and especially AFP surveillance remain significantly lower than those of the NIDs. Considering the nature of the virus (enterovirus) and its transmission more emphasis is required on health education, latrines, and safe drinking water. Coordination with other agencies involved in environmental sanitation is weak.

Afghanistan has and continues to suffer a serious brain drain. Not being able to earn even a minimum living wage and faced with an uncertain future qualified Afghans have left for more secure and greener pastures. Thus qualified and experienced locals may not be available especially in remote areas. Political allegiances and patronage further complicate the issue and people chosen especially at senior levels may not be the best qualified for the positions. Staff turnover for the above reason is another main impediment to efficient institutional performance.

Transport inadequacies play a role in efficient performance both for the regional EPI management system (REMTs and PEMTs) and the vaccinators. In some fixed centers and during NIDs cycles are not the most appropriate means of transportation in mountainous areas with steep climbs and narrow tracks. Funds for animal hire are not provided.

Significant numbers of the target population miss immunization opportunities within the areas where services are being provided. For routine EPI most of fixed centers either have male vaccinators or female vaccinators an insignificant number has both genders. Female vaccinators do not carry out any outreach. On the other hand male vaccinators do outreach four days a week leaving no cover in the centers. Moreover two vaccinators conduct outreach in the same area together, this reduces the outreach coverage significantly compared to what could be achieved if the vaccinators worked in different directions and would go for outreach on different days keeping the center open for service delivery on a daily basis. Parallel control of the EPI, different sources of funds for the staff working in health clinics and thus the lack of integration are other factors that result in opportunities being missed.

District level Planning and management is missing for routine EPI and there is a lack of health management systems. There is no focal point at the district level to direct EPI. Maps and monitoring charts are not used to plan and monitor activities in fixed centers in

some regions and areas. Vaccinators operate independently with on an average once a month visit from the PEMT members. No meetings are held at the district level to assess progress and take appropriate actions. The lowest administrative level where efforts finally focus to deliver therefore suffers lack of planning, management and coordination in respect of EPI services. Supervision and monitoring is adversely effected by lack of management at the district level beside the transport difficulties already mentioned.

Supervision is not a high priority with the programme implementers. For one reason or the other supervisory visits are quantitatively and qualitatively deficient. Where fixed centers are located in clinics, lack of integration and little knowledge of EPI by the clinic heads deprive EPI from the close monitoring and supervision.

EPI reports are delayed at all levels. Analysis is not only delayed but also deficient qualitatively. Feedback to the field to use information for better planning and remedial actions is also missing. Reports therefore have a rather limited use to take timely and required actions. The denominator for the reporting system are population based on the projections of 1978 census, these may be over or under estimates of the actual populations considering a community exposed to so many displacement. Accuracy of reports is doubtful because of incorrect recording and inaccurate age estimation at the field level.

WHO, Afghanistan Office in Islamabad maintains a national database for NID activities and UNICEF ACO, Islamabad for routine EPI activities. Although both organizations are involved in the polio eradication initiative NID data is unavailable with UNICEF and similarly the routine data with WHO. This indicates the rather disproportionate inclination of each organization towards different components of the polio eradication initiative. Both UNICEF and WHO lack appropriately qualified and full time staff to maintain a database on EPI/PEI.

Health education skills of the staff are not well developed; knowledge about vaccines and the immunization schedule is not always correctly given to the clients. This is one of the main causes of a problematic age appropriate immunization.

Considering its immense importance progress on the planned targets for AFP sentinel sites since 1997 is painfully slow. Moreover community surveillance and reporting of suspected AFP cases by health staff and the vaccinators in the remote areas is not integrated in the AFP surveillance strategy.

An affordable, sustainable and most effective way of improving programme coverage is by involving the community in the planning and implementation of health services. Community services are not being used for routine EPI. There is lack of female participation in the rural areas both as service providers and recipients in the programme. Females are also not involved in NIDs in significant numbers which otherwise have better community participation.

Days of tranquility have not been universally observed. Besides planning and supervision lapses result in areas and population segments being missed during NIDs. Further more training for NIDs does not emphasize awareness raising and thus the promotion of routine EPI to the required extent. Female participation in NIDs activities is very little.

Salaries of the EPI/PEI are provided entirely by UNICEF. Even where services are provided from their clinics most of the NGOs do not provide the salary of the vaccinator's which shows less commitment on the part of such NGOs for EPI/PEI.

VII. Lessons Learnt

VIII. Conclusions

Better organization, availability of adequate resources and increased emphasis, has resulted in better achievements for the NIDs. Comparatively much less has been achieved in routine EPI, which is an extremely important component of polio eradication strategy. To eradicate polio as soon as possible, emphasis will have to continue and progress maintained on NIDs, more emphasis will be required on routine EPI, AFP surveillance and mopping up procedures to restore the balance required for polio eradication.

To reach the objective of eradicating polio routine EPI and AFP surveillance will need improvements in a short period which is beyond the capacity of the country's feeble institutional framework (MOPH) at this stage. While efforts to improve the capacity and the involvement of MOPH continue, supporting agencies UNICEF/WHO will have to take the driving seat and treat EPI and PEI on emergency lines.

Policy endorsements and additional resources will be required to achieve the goal. This will not be possible without political sanctions by the government and the will of the supporting agencies to commit additional resources. Besides better coordination at all levels involving all agencies and sectors will be required to tap potential resources.

Considering the existing situation with extremely weak institutional framework of the country, precarious security, low EPI coverage and significant endemicity of the poliovirus in Afghanistan, breaking the transmission by the end of year 2000 seems ambitious but not impossible. However with intensive efforts it is quite possible to achieve eradication by the end of year 2001.

IX. Recommendations

A. Immediate Actions

1. Polio Eradication Strategy

Of the four integral and inextricable components for polio eradication strategy only the NIDs have made significant progress. While the pace of this progress should be maintained and further improvements made in the planning, training and supervision aspects of the NIDs, efforts should focus more on areas like the routine EPI where the achievements fall much short of those required for polio eradication. Geographical coverage of the AFP sites should be increased to meet the planned targets as soon as possible. Community surveillance, reporting by the vaccinators and peripheral health staff involved in outreach should be injected into the surveillance system. Such policy emphasis should be translated into allocation of the required resources for better field implementation of EPI, AFP surveillance and mopping up activities.

2. Coordination

Considering its emergency nature PEI should be made a regular part of the agenda at all the coordination forums including the heads of the agencies meeting and the TCC at national level, the regional coordination bodies, the technical working groups/health coordination committees at the regional levels. This will improve the required intrasectoral and intersectoral collaboration and ensure potential inputs of all agencies and sectors are tapped to achieve the PEI objectives. Senior WHO and UNICEF staff (national and regional level) should ensure their regular attendance and participation in the TCC to restore its national and decision making character.

Roles of UNICEF and WHO should be clearly defined and communicated to the field as part of improvements in coordination. Regular joint visits by senior WHO/UNICEF staff to the lower levels should be undertaken to promote teamwork and complementarity between the staff of the two agencies at the field level. The later aspect should also be emphasized in the various coordination meetings as well.

3. Routine EPI

Assessment and Planning Exercise

A district based assessment and planning exercise should be carried out immediately to assess the extent of areas that remain uncovered. Coverage in a given area relies on the following factors; the strategies and the systems followed in fixed centers, human resources and logistics, and the number of fixed centers. As a first step the exercise should assess the various strategies in use at the fixed centers and decide on the most appropriate for each to optimize routine EPI coverage. This may be a fixed, outreach or a mobile strategy or their combination in any proportion. It will also include deciding the strategy on gender distribution of staff and outreach activities to reduce missed opportunities and increase coverage. Besides staff requirements in training, numbers and categories as well as logistic requirements for the EPI management system will also need to be clearly worked out.

As a second step areas that would still remain uncovered both for routine EPI and NIDs should be worked out and the requirements including additional fixed centers to cover

these areas should be decided. Available NID resources should be utilized to carry out the exercise which can be a part of the planning exercise of the spring 2000 NIDs. The supporting agencies should then mobilize resources to meet the requirements.

Monitoring and Supervision

Monitoring and supervision should be intensified and progress review should be held at every level including the district at regular monthly intervals. Developed monitoring tools like the EPI monitoring charts should be used at every level in all regions. REMT members should visit each PEMT twice a month and as part of such supervision visit two to three fixed centers supervised by the PEMTs. PEMT members should visit each fixed center at least once a month.

The supervisory schedule should be prepared in advance and provided to UNICEF/WHO for monitoring, similarly after such visits the duly completed EPI check lists should also be provided to UNICEF/WHO. It must however be remembered that integrated services with clinic heads providing close supervision and support are indispensable for optimum supervision. A mix of quantitative and qualitative indicators should be used to monitor program progress. These can include coverage, defaulters, dropouts, and target disease surveillance.

Timely reports should be analyzed for their accuracy and achievements and used to take appropriate actions through feed back to the field. National level data on routine EPI, NIDs and AFP surveillance should be consolidated into a single database and both UNICEF and WHO should have access to such database. Needless to say that data so collected should be reviewed on a monthly basis by both the organizations jointly and used to take timely corrective actions as well as to provide feedback to the field.

District Based management

The district should be made a planning, management and a coordination unit and the district coordinator the focal point for routine EPI, AFP surveillance and NID activities. The issue should be taken up by the highest authorities of the supporting agencies with their counterparts in the Afghan government and decided as for the NIDs. It is realized that some of the districts at this stage may not be in a stage of development to accommodate additional responsibilities. In such cases the decision should be taken on an area/district basis and responsibilities devolved at least to the provincial level with continuing efforts for further devolution to districts as soon as possible.

Integration of Community Services, Social Mobilization and Health Education

The community should be involved in the planning and management of health activities in general and EPI/PEI activities in particular. At the district level community services should be integrated into the health facilities/fixed centers through district health committees, a couple of paid community workers who would supervise a number of unpaid community volunteers to cover the population in the entire catchment area.

Support agencies should give due importance to the insights gained by NGOs working at the grass root particularly in the areas of social mobilization and awareness creation. NGOs have gained considerable experience that will benefit the whole range of 'stakeholders' in this area.

Social mobilization needs to be an ongoing activity implemented in accordance with a strategy and a plan, through better health education by the staff and utilization of community structures (shooras, interest groups) and channels of communication (mosques, schools). Messages on age appropriate immunization (immunization schedule) Polio eradication and AFP surveillance should be integrated into health education.

4. NIDS and Mopping Up Activities

Planning

Days of tranquility in sufficient numbers (10 per round) should be negotiated at the highest possible level, ensuring that the commanders at the field level are apprised about the agreement well ahead of NIDs. It is not sufficient to obtain a blanket agreement for all areas, within such a broad agreement known pockets of disturbances and violations should be clearly identified and assurances obtained from all levels including the field in such cases.

Planning and supervision aspects of the NIDs should further be strengthened so that areas and population segments are not missed. This can be achieved by selecting community mobilizers and workers through community leadership and other structures ensuring that all areas and segments are represented. Appropriate channels of communication like the mosques and the schools should be utilized to the maximum. Maps should be used and cluster boundaries should be clearly marked.

NID planning should take into account a couple approach instead of two male volunteers in a team. An elderly couple nominated by the clergy/community of the locality will ensure full involvement of the females in the NID process. NGOs involvement and participation in the NIDs should be increased considerably. NGOs should also be involved in the financial, supervisory and logistic responsibilities for NIDs and their involvement should not be limited mainly to a 'one-way' information sharing. Various cadres of NGO health staff, including several hundreds of TBAs and village-based workers trained by various NGOs should be seen as potential human resources that can be easily used during special initiatives such as NIDs and PEI.

Management

Adequacy and timely provision of vaccines, other supplies like the social mobilization material and funds should be ensured in the planning and management processes. Design and production of social organization materials like flags, banners, leaflets should be done at the regional level for the NIDs. Each vaccination team should be provided a megaphone each for purposes of mobilizing communities. Transport costs should be advanced instead of being reimbursed after the NIDS.

Supervision and Monitoring

Use community leadership/local literate people as well as NGO facilities, logistics and personnel for the supervision and monitoring of NIDs. Emphasis needs to be increased on the quality and the timings of post NID evaluations for lessons learnt to be incorporated into the planning of the next round or set. A post NID evaluation team needs to be constituted for the purpose comprising of members from REMT, PEMT, the community and the NGOs.

Training

Training in NIDs for volunteers and other actors at the grass roots needs to be increased from just a day to at least two days. The curriculum should be expanded to encompass more awareness on routine immunizations, better involvement of the community and accuracy in reporting.

Frequency

Considering the emergency situation two sets of NIDs in a year seem quite justifiable. In addition mopping up activities should be held in areas identified by the surveillance and other criteria.

5. AFP Surveillance

Immediate steps should be taken by WHO to improve the progress on the planned sites for AFP surveillance. The vaccinators and the peripheral health staff involved in outreach should be used to report suspected cases to the sentinel sites for further investigations. This will improve the coverage of the sentinel sites significantly.

B. Others

Routine EPI

Policy, Strategy and Planning

It is hoped that the amorphous policy and strategic framework will soon be crystallized by the MOPH in the form of a documented policy. It is recommended that extensive consultations should be held between the MOPH and the supporting agencies especially UNICEF and WHO to ensure a sound policy/strategy.

Efforts should continue to reduce the dependency of MOPH and make it more effective. To improve the ownership of the programme by the MOPH and therefore its integration and sustainability, a phased hand over of management and financial responsibilities should be planned and implemented. This will obviously have to coincide with the improving capacity of the MOPH for which it will need to be assisted.

The MOPH, UNICEF and WHO should establish a positive atmosphere to encourage more NGOs to work in the region and to enable the existing ones to expand their geographical coverage. Support agencies should improve their communication and information sharing with NGOs, including feedback and sharing of experiences gained through innovative programmatic interventions. Various cadres of NGO health staff, including several hundreds of TBAs and village-based workers trained by various NGOs should be seen as potential human resources that can be easily used during special initiatives such as NIDs and PEI.

Based on the district-based assessment mentioned in section A of the recommendations, appropriate strategies for optimal coverage should be decided with respect to the functioning of fixed centers and their numbers. This may include fixed, outreach or mobile strategies or its combination in any proportion. The ideal staff strategy would be to have a male and a female vaccinator in a fixed center. The female vaccinator would provide services for six days a week in the center, while the male will do the outreach for this period. Where female vaccinators are not available the two males can do outreach and static immunizations in the clinic on alternate days. In view of the mission a joint two-vaccinator outreach strategy is not necessary.

The planning process for routine EPI should not be a top down exercise. It should start at the district level and developed plans consolidated at the higher levels. The NGOs and grass root community leadership should be involved in the planning process. Individual fixed centers should plan their activities using maps and community leaderships to have wide and complete coverage of their catchment areas. NID microplans should be made the basis for developing routine fixed and outreach activity plans.

Human Resources and Training

Vacant UNICEF and WHO positions should be filled up as a matter of urgency focussing on the weaker areas as a priority. Deployment of international staff (qualified female staff as much as possible) should be considered to build and further strengthen counterpart capacity. Alternatively consideration should be given to assigning international staff based in Islamabad to provide program backstopping to activities in the region through regular, frequent and extended monitoring and supervision visits to Afghanistan. Selected staff from the REMTs and PEMTs should be provided mid level managers training by WHO. Both UNICEF and WHO should employ a staff with experience in health statistics for maintaining a database on EPI/PEI.

To promote selection of qualified and experienced staff the supporting agencies should agree on a selection criteria with the MOPH and only finance the salaries of the staff who

meet the criteria. The MOPH should also be urged to control as far as possible the issue of staff turnover.

Standardization of salaries amongst MOPH and NGO staff of equal cadres should be introduced. The remuneration package should be reassessed by all the stakeholders and made more attractive or at least revised to provide a minimum living wage.

Incentives should be made performance based and indicators like coverage, report accuracy and timeliness should be used to assess the vaccinators performance. The assessment should be carried out at the district or provincial level during the monthly progress review, which should coincide with the distribution of monthly salary. For PEMTs and REMTs indicators like adherence to supervisory schedule, regular provision of the check list etc can be added to those for the vaccinators and assessed at the monthly progress reviews. Salaries/incentives for the PEMTs and REMTs should also be provided on the day of the progress review and assessment. To instill a competitive spirit based on progress reviews at quarterly intervals a best PEMT in a region and a REMT in the country should be rewarded with additional incentives.

Where fixed centers are located within NGO clinics the salary of the vaccinators should be provided through the NGOs. In such cases the respective NGOs will become the employers and the MOPH will take up a technical and supervisory role. This will promote better integration of services. Ideally the NGOs should take up the salary of the vaccinators where services are provided from their clinics.

UNICEF should help the REMT and the PEMTs to acquire the management skills and tools to be able to guide, monitor and supervise the implementation of the EPI activities. WHO should reactivate the training program to provide middle managers and supervisors with the knowledge and skills necessary for improving the situation. A key area for guidance and training should be to conduct thorough progress reviews and provide feedback at different levels of operations.

Training aspects of the female vaccinators are particularly weak. On the job training by REMT and PEMT should be provided as a matter of priority to female EPI staff and vaccinators in general as part of the supervision. Health education skills should be emphasized to the staff in the ongoing refresher training to vaccinators. How immunization works (that a single dose may not be sufficient) and the immunization schedule should receive particular emphasis to promote age appropriate immunization. Another area that needs to be emphasized during training is accurate age estimations and correct recordings in the reports.

Coordination

Regional participation and national agenda should be insured in TCC meetings. The MOPH should be included in the health coordination committee meetings of the central region and assisted by UNICEF/WHO to chair the meetings. Considering the emergency nature of the polio eradication initiative it should be regular part of the agenda in both national and regional level health meetings. Progress against planned targets should be

reviewed and necessary feedback provided to the field. Indeed PEI/EPI should be made a regular part of the agenda in the meetings of the regional coordination bodies for the promotion of intersectoral/interagency collaboration.

The membership of the TCC should be expanded to include the ministry of culture and education and ways explored to utilize their inputs on a regular basis as partners in PEI/EPI. Activities should also be well coordinated with UN agencies like the UNHCR and WFP as well as other agencies (NGOs/UN) that involve community structures (village organizations). This should not only be limited to attending meetings, but should involve a main focus on development of systems to incorporate their inputs for PEI/EPI.

Considering the nature of the virus (enterovirus) and its transmission more emphasis is required on health education, latrines, and safe drinking water. Coordination with other agencies involved in environmental sanitation should be improved.

Management, Reporting and Disease surveillance

It is recommended that wherever fixed centers are located in clinics direct management should be provided by the clinic heads, the MOPH (REMTs and PEMTs) should take up a technical supervisory role in such cases. REMTs and PEMTS should only provide direct management and supervision in fixed centers that are not located in clinics.

Monthly meetings should be held at district, provincial and regional level to review progress as part of the district based health management system. Thorough progress reviews based on report analysis and feedback to all concerned will hold the key to successful program implementation.

Reports should be delivered in time and discussed at regular meetings not later than the first four days of each month between the PEMT and the vaccinators, and the end of first week between the PEMT and the REMT. One of the ways to ensure timely reports is to coincide distribution of salary/incentives with the receipt of monthly reports from the vaccinators, PEMTs and the REMT. UNICEF should take part in monthly progress review of the REMT. Consolidated quarterly reports should be forwarded to UNICEF not later than 10th of the month following the end of quarter.

Morbidity returns in general and those on EPI target diseases and AFP surveillance in particular should be discussed as a part of the progress assessment in the meetings held at various levels.

Cold Chain, Logistics and Service Delivery

Efforts should be made to provide cold chain to the remaining 10-15% of the country where the cold chain infrastructure has not yet been extended.

Funds should be allocated to fix the cold rooms, which at the provincial level are in a poor shape. Sufficient availability of funds should also be ensured to run the generators in the cold rooms. Training should be provided to cold chain technicians at the regional level to handle major repairs of the refrigerators being used in the field.

Transport needs for the REMT and PEMT members should be carefully assessed. The allocation of the transport should be based on the following criteria. REMT should receive a vehicle for every two provinces that they cover and two motorcycles for each PEMT. In the fixed centers where cycles are not the appropriate means of transportation funds should be made available for animal hire. The provision of transport will facilitate better supervision besides having positive affect on the areas covered.

Training and supervision should address the regional differences that exist in service delivery especially the attitude of the vaccinators with their clients, safe injection practices and leaving the vaccines outside the cold boxes for a long time. Health education should emphasize age appropriate immunization, immunization schedule and the importance of retaining the immunization cards.