

**Social Action Plan 1992-95:
Government of NWFP**

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Table of Contents

Social Indicators for the NWFP	1
The SAP in NWFP.....	1
The Impact of SAP on Social Sectors and a Quantitative Assessment of the Gap left for Universalization of Coverage	2
Cost SAP Financial Requirements	3
Community Participation	6
The Education Sector	11
The Health Sector.....	15
Rural Water and Sanitation Programme	18
Annex.....	20

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Social Action Plan 1992-95: Government of NWFP

Social Indicators for the NWFP

Economic growth in Pakistan has been high, averaging 6 per cent over the last three decades, but it has not been reflected in the social sectors, partly because it received only 4 per cent of the GDP even by 1990/91. As a result, social indicators have remained low. Only a third of the population is literate, primary schools are available for only two-thirds, piped drinking water to just over a half, and longevity is 57 years. Worse still, these indices fall below those for countries with a lower income. India's GDP per capita is lower and its purchasing power half that of Pakistan, but half its population is literate, two-thirds has access to piped drinking water, and longevity is 59 years.

Social indicators in the NWFP reflect the average for the country as a whole, but in some cases are worse, as Table 1 shows. Primary school enrolment in the NWFP, at 55% is below the national mean of 66%. This not due so much to male enrolment at 81%, which is just below the country mean of 83%, as to female enrolment at 27%, which is virtually half the national mean of 49%. Literacy in the province at 17%, is also only half of the national mean of 34%.

Health indicators for the province fare slightly better than the indicators for education. The Infant Mortality Rate (IMR) for NWFP at 90 per 1000 births, is close to the national mean of 88. Similarly the Child Mortality Rate (CMR) for NWFP 133 per 1000 births, is close to the country mean of 130.

The water and sanitation indicators for the province are relatively good for water, but bad for sanitation. The proportion of the rural population with piped water in the NWFP is 60%, above the country mean of 44%. The proportion of the rural population with sanitation facilities in the NWFP however is just 2%, compared to a country mean of 12%.

The SAP in NWFP

The SAP is intended to help overcome this deficiency in the social sectors. The sectors on which SAP expenditure will be concentrated in the NWFP, are education, health, and water supply plus sanitation. Table 2 gives the provincial allocation of development expenditure for SAP, for these three sectors. The total SAP allocation for the NWFP over the period 1992/93 to 1994/95 is Rs. 7.6 billion. The phasing of the annual expenditure over the three SAP years will be Rs. 2.1 billion, Rs. 2.6 billion, and Rs. 2.8 billion. Therefore SAP will allow an approximate doubling of the mean annual expenditure on SAP sectors over the pre SAP benchmark year of 1991/92.

SAP will result in some reallocation of sectoral shares in development expenditure. Table 2 shows that in the benchmark year of 1991/92, the sectoral share of annual expenditure on education was 61%, on health 15%, and on water plus sanitation 23%. SAP allocations over three years will lower the shares of education to 50%, of health to 9%, and increase the share of water plus sanitation to 41%. So in the NWFP, sectoral priority is being given to water plus sanitation, followed by education.

As a result of SAP development expenditure on increasing capacity in these sectors will also increase. Table 3 shows that annual recurring expenditure on the SAP sectors increases from Rs. 2.1 billion for the benchmark year of 1992/93, to a mean of 2.5 billion over the SAP years. So a doubling of development expenditure on the SAP sectors results in a 30% increase in the annual

recurrent expenditure. However recurring expenditure does clearly have an increasing trend, going from a 16% increase in the first year of SAP, to a 41% increase in the third year of SAP.

The Impact of SAP on Social Sectors and a Quantitative Assessment of the gap left for Universalization of Coverage

These development and recurrent expenditure allocations under SAP will allow a significant increase in the coverage of the education, health, and water plus sanitation facilities. The projected targets and their estimated costs are given in Tables 4 to 6 for the three sectors respectively. However the increase in coverage enabled by SAP will in many cases still leave a gap to be filled for universal or optimal coverage of the entire target populations. To get a long term perspective of the problem, some post SAP targets need to be projected, and the development costs for achieving these to be projected, and the development costs for achieving these targets estimated. Table 4 to 6 also give these post SAP projections for the three sectors.

Education

Table 4 gives the SAP and post SAP projections for primary education. The enrolment ratio in the benchmark year of 1991/92 is 55%. This enrolment ratio is projected to increase as a result of SAP expenditure by 23%, to a 1995 level of 77%. This represents an increase in the number of children enrolled from 1.3 million in 1991/92 to 2.0 million in 1995, that is by 0.7 million. The mean unit cost for enrolling a child over the SAP years works out to Rs. 5296, given a total sectoral allocation of Rs. 3.8 billion.

The SAP 1995 target of an enrolment ratio of 77%, leaves a post SAP gap of 23% to achieve universal primary education. For a post SAP projection, we can assume a rate of growth of the enrolment ratio equal to the SAP rate. On this assumption, the post SAP gap will take another 3 years to fill, giving a terminal year of 1998 for achievement of universal primary education.

The post SAP gap of 23% in the enrolment ratio represents an increase in the number of children to be enrolled, from 2 million in 1995 to 2.9 million in 1998, that is by 0.8 million. Now we can make another assumption that the mean unit cost for enrolling a child in the post SAP years in equal to the SAP cost. Given this assumption, the total cost of enrolling an additional 0.8 million children to fill the post SAP gap, will be Rs. 4.3 billion.

Health

Table 5 gives the SAP and post SAP projections for the health sector. Three critical areas in health have been prioritized for increased investment under SAP. These are, the poly immunization program for infants to reduce infant mortality, the expansion of Basic Health Units (BHU) for better population coverage, and the upgradation of these BHUs. For detailed financial allocations for other programs see the sectoral chapter.

Table 5 shows that the benchmark 1991/92 immunization coverage of the population of infants aged less than one year is 87%. The SAP target is to raise this immunization ratio by 3% to a 1995 level of 90%. This represents a mean annual rate of immunization of 0.6 million children, and an aggregate of 1.8 million immunizations by 1995. At a unit rate of Rs. 64 per shot, the SAP cost of the immunization program comes to Rs. 114 million.

The SAP target of a 90% immunization ratio by 1995, still leaves a post SAP gap of 10% for universal immunization of the population aged less than one year. Because of the large gap, we have calculated the coverage possible by the year 2000. Again we assume a post SAP ratio of growth of the immunization ratio of 95% for the year 2000. The post SAP target requires an

aggregate of 3.4 million immunizations over the 5 years. Assuming a post SAP unit cost equal to the SAP cost, gives a required expenditure of Rs. 218 million to reach the post SAP target.

The program to expand BHUs is based on providing one BHU per tehsil. Table 5 shows that in the benchmark year of 1991/92, 92% of the tehsils had BHUs. The SAP target is to increase in the number of BHUs from 699 in 1991/92 to 756 by 1995, that is by 57. At a unit cost of Rs. 2 million per BHU, the increased coverage will cost Rs 114 million.

The third program is to upgrade the facilities of all BHUs. Table 5 shows that SAP target is to raise the proportion of upgraded BHUs from scratch to 48% by 1995. This represents an upgradation of 181 BHUs. The unit cost for upgradation of a BHU is Rs. 0.5 million. So the SAP target will require Rs. 181 million.

The 1995 BHU upgradation level of 48% leaves a post SAP of 52% for upgradation of all BHUs. If we assume a post SAP rate of upgradation of BHUs equal to the SAP rate, universal upgradation will take four years. This gives a terminal year for upgradation of 1998/99. Universalization will require the upgradation of 394 BHUs. If we assume a post SAP unit cost of upgradation equal to a SAP unit cost, the total post SAP cost will be Rs. 197 million.

Drinking Water Supply and Sanitation

Table 6 gives the SAP and post SAP projections for Drinking Water Supply (DWS) and Sanitation. The table shows that in 1991/92 drinking water is supplied to 60% of the rural population. The SAP target is to raise this coverage by 10% to 70% by 1995. This represents an increase in the population covered, from 7.59 million in 1991/92 to 9.57 million in 1995, that is by 1.98 million. At a unit cost of Rs. 1006, the SAP drinking water program will cost nearly Rs. 2.0 billion.

The SAP target of providing 70% of the rural population with drinking water leaves a large gap of 30% for universal coverage. Therefore we have made a projection of the increase in coverage possible by the year 2000. As usual we will assume a post SAP growth rate of coverage equal to the SAP rate. This gives a 20% increase in coverage of the rural population, to a 2000 year level of 90%. Again assuming a post SAP unit cost equal to the SAP unit cost, gives a required total cost of Rs. 4.3 billion to meet the post SAP target.

Table 6 also gives the projections for sanitation. The table shows that only 2% of the rural population has sanitation in the benchmark year of 1991/92. The SAP target is to increase this coverage by 15% to a 1995 level of 17%. This will require an increase in the population covered, from 0.25 million in 1991/92, to 3.32 million in 1995, that is by 2.07 million. At a unit cost of Rs. 400, this gives a SAP cost of Rs. 829 million.

The SAP target of 17% coverage by 1995 still leaves a very large gap for universal coverage of the rural population. Therefore we have again made a projection for the increase in coverage possible by the year 2000. We will as usual assume that the post SAP rate of growth of sanitation coverage will be equal to the SAP rate. This gives a 23% increase in coverage from the 1995 level of 17% to 40% by the year 2000. Again if the post SAP unit cost is assumed equal to the SAP unit cost, then the post SAP cost will come to Rs 1.5 billion.

Post SAP Financial Requirements

The post SAP projections are useful for highlighting the problem of maintaining at least SAP levels of expenditure after SAP. There are two expenditure streams that have to be maintained on trend, development, and recurrent. A drop in the post SAP development expenditure, below SAP levels, will erode the increase in coverage made by SAP, leaving a cost without a benefit.

And a drop in the recurrent expenditure below SAP levels will idle the expanded capacity, again eroding gains in coverage.

We have some quantitative estimates of the problem. Table 2 shows us that SAP approximately increases mean annual development expenditure to Rs. 2.5 billion. Table 3 shows us that SAP increases mean annual recurrent expenditure to Rs. 2.8 billion. So SAP increases mean annual total expenditure to Rs. 5.3 billion over a pre SAP benchmark level of 3.2 billion. This is an approximate increase of 60%. Once SAP finishes, maintenance of SAP trends will generate this annual additional requirement of approximately Rs 2 billion.

Table 1: Indicators of Social Services, 1992

	Pakistan	NWFP
Population (1992 projection) (million)	119.170	15.624
% of Total Population	100.0	13.1
Rural Population as % of total	68.9	83.2
Education:		
Total primary enrolment (%) 1992	66.3	55.0
Male	83.0	81.0
Female	49.2	27.0
Literacy	34.8	16.7
Male		28.9
Female		6.5
Health:		
Infant Mortality Rate (per 1000 births)	88	89.5
Child Mortality Rate (per 1000 births)	130	133
Immunization (million)		0.545
BHU (coverage of Tehsils) (%)		92.0
Water and Sanitation:		
% Rural Population with piped water	44.0	60.0
% Rural Population with sanitation	12.0	2.0

Table 2: NWFP: SAP Development Expenditure Sectoral Allocations

Sector	Bench - mark 1991/92	%	92/93	93/94	94/95	Total SAP 92-95	Total SAP 92-95 %
Education	710	61	1080	1330	1350	3760	50
Health	178	15	197	224	247	668	9
Water	271	23	729	1122	1296	3147	41
Total	1159	100	2006	2676	2893	7575	100

Table 3: NWFP: SAP current expenditure: Sectoral Allocations

Sector	Bench - mark 1991/92	%	92/93	93/94	94/95	(Rs in Million)	
						Total SAP 92-95	Total SAP 92-95 %
Education	1560	74	1824	2014	2223	6061	71
Health	313	15	420	532	637	1589	19
Water	231	11	237	296	355	888	10
Total	2104	100	2481	2842	3215	8538	100

Table 4: NWFP: Education Projections

	Benchmark 1991/92	1995	SAP change 1992-95	1998	Change for Universal Coverage 1995-98
Enrolment (%)	54.6	77.4	22.8	100	22.6
Total Population (5-9 million)	2.436	2.63 6	0.2	2.856	0.22
Enrolled	1.330	2.04 0	0.710	2.856	0.816
Unit Cost/Child (Rs)			5296		5296
Total cost (M. Rs)			3760		4321

Note:

Assumptions:

- 1 Post SAP enrolment growth = SAP.
 2 Mean unit cost/child = Total SAP cost/SAP enrolment increase.
 3 5-9 years age cohort growth rate = 2.77. as in blue book projections.

Table 5: NWFP Health Projections

	Benchmark 1991/92	1995	SAP change 1992-95	2000	Post SAP change 1995-2000
Immunization of <1 yr old (%)	87	90	3	95	5
Population <1 yr old (No)	0.626	0.677	1.98	0.774	3.670
Immunization million	0.545	0.610	1.78	0.735	3.418
Unit Cost/shot (Rs)			64		64
Total cost (M. Rs)			113.9		218.2
% Tehsils with BHU's	92	100	7		
No. BHU's	699	756	57		
Unit Cost (M Rs)			2		
Total Cost (M Rs)			114		
BHU Upgradation (%)		48	48	<u>1998/99</u> 100	<u>1995/99</u> 52
BHU upgradation No.		362	362	756	394
Unit Cost/BHU (M Rs)			0.5		0.5
Total Cost (M Rs)			181		197

Table 6: NWFP Water Supply & Sanitation

	Benchmark 1991/92	1995	SAP change 1992-95	2000	Post SAP change 1995-2000
Water Supply %	60	70	10	90	20
Coverage total rural population	12.650	13.675	1.205	15.379	1.704
Coverage No.	7.590	9.572	1.982	13.841	4.269
Unit Cost (Rs)		1006			1006
Total Cost (M Rs)		1994			4295
Sanitation (%) coverage	2	17	15	40	23
Coverage No.	0.253	2.325	2.072	6.152	3.827
Unit Cost (Rs)			400		400
Total Cost (M Rs)			829		1531

Community Participation

Introduction

The problem of funding of social sectors can be analytically separated into three components.

- a. The generation of investment.
- b. Inefficient utilization of this investment for the creation of new capacity.
- c. Inefficient management and maintenance of this capacity.

The problem of generation of investment is obvious, and depends upon levying additional taxes and user charges. However another major problem is that a rupee worth of investment in the social sector results in much less than a rupee worth of new capacity. Therefore an increase in the efficiency in the efficiency of investment can significantly decrease the required level of investment.

The third major problem is that of service less capacity. This manifests itself in the phenomena of schools without teachers, basic health units without doctors or medicines, and population planning units without proper staff. Therefore if services per facility are increased, this will reduce the required number of facilities, and the required level of investment.

So there are problems of generating a Rupee worth of investment, of increasing the facility that a Rupee worth of investment creates, and of increasing the services that a Rupee worth of facility offers.

One solution that addresses all three problems is to organize the community to participate in the generation and delivery of its own social services. For our purposes, a community can be defined as a group of people sharing a specific need like primary health, education, water supply or sanitation services. The specific unit, however, may be larger or smaller. For example, married women of a particular age cohort in a village may form a separate community because of their shared need for access to a family planning services. This gives a community of users of a particular facility.

A community so defined, provides the most efficient solution to the problems of funding, efficiency of investment, and service less capacity.

For funding, the community can be organized on the twin principles of willingness and ability to pay. There is also a greater feasibility of the local government being able to levy taxes, on the condition that the revenue is spent on the generating community.

The two other problems, of the low efficiency of investment, and the creation of service-less capacity, are both caused by the absence of accountability at the local level. Accountability can be ensured either through improved increased supervision by the government, or through improved increased supervision by the government, or through monitoring and supervision directly by the community of users. Since the community has the greater incentive to monitor performance, it will be more effective to mobilize them.

It is important to recognise that this partial transfer of responsibility from the government to the community radically changes the motor of growth. The responsibility of the government is based generally on moral or ethical grounds, while that of the community of users is rooted in their own self interest. More importantly, this introduces the principle of competition between communities. If diverse communities are empowered to change their own conditions, then those that fail to take up the challenge will be left behind. This dynamic is clearly stronger than the purely ethical one.

So the community can help solve the problems of funding, efficiency of investment, and service less capacity, to reduce the anticipated shortfall in post SAP investment levels. However the process of organization and involvement of the community is a long and difficult, and cannot be turned on instantly at the end of SAP to help with post SAP growth. For the community to be effective in economizing investment levels post SAP, it needs to be organized during SAP, and with the added help of SAP funding.

General Forms of Organization of the Community in NWFP

There are four agents in social sector development, the government, public representatives, the community of users, and Non Government Organizations (NGOs). Given NWFP's conditions, all four will have to cooperate in the endeavour. In the immediate future, only the government is capable of funding, administering, and implementing projects. The main administering unit is envisaged to be the District Development Committee (DDC). It is proposed that the DDC should comprise the following:

1. The Deputy Commissioner of the district
2. The line department engineers
3. Other line department officers
4. The provincial Deputy Secretary Finance
5. A representative of Planning and Development Department
6. The local Members of the National Assembly (MNA)
7. The local Member of the Provincial Assembly (MPA)
8. The Chairmen of the Zila Council
9. Any Senators belonging to the area.

Public representatives can play a major role in obtaining financial support for social sector projects for their constituents. However, they do not, form a continuous hierarchy, but fall into two distinct levels. The higher level comprises the MNAs, MPAs, Senators, and even members of the Zila council. The lower level comprises the members of the rural Union Council, and Town and Municipal Committees. These lower level councils, called Local Council (LCs), are more integrated with the community of users rather than the higher level public representatives. These LCs can be integrated with the sub-divisional offices of the DDCs.

The community of users are the most unorganized, and technically unskilled of the four agents. At the micro level they need to be organized into Community Boards (e.g. School Boards or Hospital Boards, depending on need). Community boards are envisaged advocate the need for a facility, negotiate with the LC cum sub-divisional DDC for finances, and help execute and administer it. The role of such boards can be increased gradually in keeping with the development of their administrative capacities. The simplest most unskilled job for the nascent board is monitoring the operation and maintenance of the project in a watch dog capacity. From this low level the complexity, time allocation, and skill requirement of the job successively increase to supervision, maintenance, operation, implementation and eventually the overall design of the project. NGOs have three relative advantages vis a vis the other agents. They are good organizers, they embody and impart technical skills, and can also help raise financial support. In NWFP, only the NGOs are in a position to organize the communities of users into community boards. Therefore, this must be their major role. The community boards can be trained to take over the more complex phases of the project gradually. Finally they can catalyze the community of users to accumulate on their own, and raise financial support from outside the community. The NGOs can work with community boards, the DDCs and the LCs.

A Plan for integrating the Community into SAP Programs

This model for integrating the community of users into the SAP program argues that the community be phased in gradually. This implies going from simple jobs like monitoring, to

successively more complex and skill and time demanding jobs like supervising maintenance, running, execution, and eventually design. At present the community is not organized at all to undertake even the simplest job of monitoring the running and maintenance of a facility, like a school or a basic health unit. Therefore the process will have to begin with the first phase.

The model also argues that the government in NWFP is in no position to act as an organizer of the community of users. This has to be done by the NGOs whose greatest relative advantage lies in this function. It is precisely the presence of specific NGOs in NWFP which offers a major institutional advantage, on top of it's edge in the social sectors, in involving the community of users in social sector development.

The position of NGOs in NWFP is the following:

- a. The NWFP has 20 districts. There are large scale NGO projects operating in 8 districts currently. These are:

District:	Project:
Chitral	Agha Khan Rural Support Program (AKRSP) Chitral Area Development Project.
Swat	Kalam Integrated Area Development Project Pata Ground water Project.
Dir	Dir Area Development Project.
Malakand	Social Forestry Project.
Swabi & Mardan	German Integrated Rural Development Project
Kohat and Charsada	Sarhad Rural Support Corporation (SRSC).

- b. The major asset the NWFP has in terms of NGOs is the Agha Khan Rural Support Program (AKRSP) operating in Chitral District (and also in Northern Areas). It is a successful forerunner and has become a model for a breed of such programs. Its work ethos is that it helps create Village Organizations (VOs) in rural communities. It then cooperates with the VO to set up a demanded project to generate employment and income. Over a decade, AKRSP has managed to cover between one third and one half of the villages in its area of operations. Albeit, the nature of the work involves high overhead costs, which approximate 50 per cent of the total budget.
- c. The second major community development NGO in NWFP is the Sarhad Rural Support Corporation (SRSC). The SRSC is modelled on the AKRSP. Over a period of three years it has begun operating in 131 villages.
- d. The National Rural support Program (NRSP) has been instituted as an umbrella program for provincial rural support programs (RSPs), and to take them to scale. The NWFP government and NRSP have agreed that NRSP will begin operations in the 8 districts cited above that already contain projects. In addition NRSP will operate in two new districts, Mansehra and Kohistan.
- e. Between them AKRSP and SRSC currently run 545 VOs.

What emerges from the above is that for the immediate SAP program of 3 years, NRSP is ideally placed to help organize communities of users. However its forerunners, AKRSP and SRSC have social sector programs for them will be a new initiative. Accordingly, the NWFP government intends to involve NRSP with the SAP program in the 10 districts where it will come to operate. In the remaining 10 districts, the Planning and Development (P&D) will carry out the SAP program. The modus operandi for involving NRSP will be, that the government will give a list of projects to NRSP. NRSP will then initiate a dialogue with existing VOs about the feasibility and the extent of

their involvement with the projects. Some of the possibilities for the extent of involvement of the VOs in SAP projects are the following.

SAP projects can be divided into 6 successive phases. These are:

- I. Identification and Location.
- II. Financial Conceptualization and Technical Design.
- III. Execution.
- IV. Operation.
- V. Maintenance.
- VI. Monitoring and Evaluation.

The following roles are planned for the 4 agents in these 6 phases.

Identification and Location

The identification and location of SAP projects will be largely through a combination of the government and public representative in the first year of SAP. The NWFP government's machinery for SAP consists of the following hierarchy. There is a SAP coordination cell, set up in the P&D Board, with an Additional Secretary as Chief Coordinator. A Finance Coordination Cell in the Finance Department and Technical Coordination Cell in the line agencies and works department are proposed. This is followed by District Development Advisory Committee, (DDAC). The DDACs have been empowered by an act of the Provincial Assembly since 1985. They consist of the Members of the Provincial Assembly (MPA), the line departments, and the Deputy Commissioner. The DDACs identify the projects in education, health, and rural water supply, and their location.

In addition, two foundations have been proposed to attract investment into the education and health sectors. The Sarhad Education and Health Foundations will have a 50-50 funding from the Federal and Provincial Governments, but will attract private grants as well. These foundations will work in tandem with the DDACs.

In subsequent years, NRSP can help organize local communities into community boards in their areas of operation. These boards can identify projects, negotiate with the DDACs and other public representatives for financial support, and with the NRSP for both financial and technical support.

Financial Conceptualization and Technical Design

At present the financial Conceptualization of SAP project by the DDAC is a simple one. The DDAC provides the entire cost of the project. In villages where the NRSP comes to organize community boards, this will have to change. Community boards should be encouraged to raise counterpart funding to match the grants too can be supplemented (or even replaced) by development loans, to be repaid by the communities. As the principle of counterpart funding by community boards takes hold, it should help to maintain and enhance the level of post-SAP social sector investment.

There will be problem of the coexistence of new community funded facilities alongside older government funded facilities. The introduction of community funding for maintenance of all facilities can help ease the way out of this problem. However in the long run, the funding of new facilities will have to be based on a discretionary system of ability to pay, with the higher income groups cross subsidizing the poorer.

Supervision of the technical design of the project is a highly skilled job, and the DDACs should carry this out in the first year of SAP. In the following years, NRSP's skills can be used to

supplement the DDAC's skills where applicable. The community boards will not be ready to take on this skilled job within the SAP years, but could possibly do so later.

Execution

The execution of the project is often a highly skilled job. It may require a high level of capital equipment, and a large administrative apparatus. In the immediate future, these can come only from the government, namely the engineering line departments. However, even at this stage, the job of monitoring and evaluating a project can be entrusted to community boards, where they have been established. In fact, community boards will be in the best position to monitor the execution of the project. If the funding is in the hands of the DDACs, the boards can report their findings to the DDACs. If the funding is in the hands of NRSP, then the boards can even control payments to contractors till they are satisfied. This will bring in the principle of accountability right from the inception of the project, attacking the critical problems of trickle down, and service less capacity.

Operation

Project are run by professionals, technocrats, and managers. SAP projects will also be run by the line departments of education, health and water supply departments for 3 years. Again, however, monitoring and evaluation of this operation can be carried out by community boards, as they become organized. These boards can submit regular reports to the DDACs controlling the financial allocations. The continuation of the project can be made contingent upon the boards report. If the financial allocation for running the project has been handed over to NRSP, or the board itself, then accountability can be even more strictly instituted.

Community boards for education and health need to be especially weighted in favor of women. Women have been demonstrated to be more aware of the households social needs, the therefore would provide better monitoring these social facilities.

Maintenance

Maintenance is a distinct job from operating a project, and it requires if anything, more skills, in line with execution. So, as with execution, maintenance has to be carried out by the engineering line departments. However, as with execution, the monitoring and evaluation of this maintenance can be carried out by community boards, when they are organized. In fact this perhaps is the simplest and least skilled function that can be taken up by the board. The handling of financial allocations for maintenance is also the easiest, and can be handed over to a board. Capital accumulation for maintenance of a facility is also the easiest step to take in the long run process of encouraging accumulation at the community level.

Monitoring and Evaluation

The government has an elaborate apparatus for monitoring and evaluation. There is a Chief Minister's Inspection team. P&D has a Monitoring and Evaluation Cell. This cell has division level directors with investigating facilities. SAP projects will also be monitored using this apparatus. However, where community boards become organized, they can be encouraged to take on the job of monitoring and evaluation of the execution, operation and maintenance of projects.

Decentralization

Decentralization of decision making powers more in three directions as illustrated by the specific measures outlined above. Decision making power can be moved down the ladders of the government, or into the hands of public representatives, or of the community.

The creation of the DDCs, empowering them, and transferring financial allocations to them, will decentralize decision making in the government. Administrative decentralization also requires institutional strengthening to be able to handle the greater work load, and the higher skills required. For this, additional staff has to be provided to line departments.

The power of public representatives is difficult to decentralize or govern by administrative fiat. However, the lower level LCs can be given a larger administrative role in SAP projects, and their financial allocation ceiling raised. The community of users can also be similarly empowered. As community boards are formed, they can be given more administrative powers over projects, beginning with monitoring and evaluation of the execution, running, and maintenance of projects. Some limited financial allocations can also be transferred to the village level boards.

Decentralization will also require the transfer of some financial allocation from the government, to NGOs like NRSP in the long run.

The Education Sector

The Aggregate Sectoral Program

The SAP development budget for education, recapped in Table 1 here, is Rs. 3.8 billion spread over the three years. The annual phasing of the budget is Rs. 1.1 billion, followed by Rs. 1.3 billion, another Rs. 1.4 billion. The increase in the mean annual expenditure through SAP is 57%.

The additional capacity created in education will entail an increase in the mean annual expenditure from Rs 1.6 billion to Rs 2 billion, that is, a 25% increase.

The increase in SAP development expenditure will allow an increase in the primary enrolment ratio in the province, from its current level of 55% to 77%. This will entail, a Table 2 recalls increasing the enrolment by 0.7 million children.

A post SAP gap of 23% towards universal primary education, will require enrolling another 0.8 million children. This will take another three years after SAP, assuming equivalent rates of growth pre and post SAP, and cost another Rs. 4.3 billion.

This chapter defines the physical projects planned to reach the SAP target. Note that the size of the SAP education allocation for the province has been increased from Rs 3 billion to Rs 3.8 in recent negotiations, since the planning of these projects. This 24% increase will be distributed in proportion to the existing shares of the projects.

The Four Priority Projects in Education

The provincial government has determined four priority areas in which major investment will be needed to achieve these targets for the education sector. These areas are:

- a. Primary schools.
- b. Teacher training.
- c. Female literacy.
- d. Support for the Department of Education.

The allocations for these four projects are given in Table 3. The largest project has to be new primary enrolment. The development budget for primary school capacity to be able to meet the SAP targets for primary enrolment. The development budget for primary schools is Rs 3.1 billion. This will entail a recurrent budget over 3 years of Rs 6.6 billion. This gives a total budget for primary schools of Rs 9.8 billion.

To meet the additional demand for teachers, the next largest project is for teacher training. The development budget for teacher training is Rs 150 million. The recurrent expenditure on this project will be another Rs 150 million. The total budget for teacher training comes to Rs 0.3 billion.

The next educational priority in the province is female literacy. The female literacy project will require a small development budget of Rs 3 million in development costs, and another Rs 1 million in recurrent costs. So the Education Department support project has a total budget of Rs 5 million.

The aggregate development budgets of these four projects come to Rs. 3.3 billion. The aggregated recurrent budgets for the four projects over these three years come to Rs 6.8 billion. The total budgets for the four projects aggregate to Rs 10.1 billion. This is broadly in keeping with SAP education sector allocation given in Table 1, or Rs 3.8 billion for development expenditure, Rs 6 billion for recurrent expenditure, which gives Rs 9.8 billion for total expenditure. It is clear that meeting education sector targets will require an increase in the allocation for recurrent expenditure.

These projects are detailed below:

Primary Schools

The number of new primary school places that have to be created, in both existing schools, and new schools, can be envisaged simply as a number of new primary schools. The number of new primary schools needed depends upon the enrolment target set. Table 2 above shows that the SAP target is to enrol an additional 0.7 million children by 1995. The post SAP target is to enrol another 0.8 million children by 1998 for universalization of primary education. Therefore 1.5 million additional children have to be enrolled over the SAP and post SAP periods. Table 4 lays out some schooling requirements, and the assumptions these are based on, to enrol an additional 1.5 million children. Table 5 then costs these schooling requirements.

Table 4 shows that there are approximately 18,000 schools in the NWFP, containing 1.330 million children. This gives a mean enrolment per school of 75. Given that the primary school is defined as comprising the first five classes, this gives a mean of 15 children per class. Based on these assumptions, the target of enrolling an additional 1.5 million children would require more than doubling the number of schools over the next six years. This is clearly untenable.

However Table 4 sets out another alternative, which changes some of these child class ratios. The weakest link in the chain is the number of children per year. 15 children per class is simply too low a number to allow universalization of primary education to have a much larger class size. Therefore we have doubled the number of children per class to 30. This doubles the number of children per school to 150. This doubling is allowed by increasing the number of teachers per school as seen in the following project on teacher training. The new child school ratio of 150 implies that enrolling an additional 1.5 million children will require 10,000 new schools over the SAP and post SAP periods. The SAP target of 0.7 million children to be enrolled requires 4500 new schools. While the post SAP target of 0.8 million children to be enrolled requires another 5500 new schools.

The SAP target of 4500 new schools has been allocated over the public private sectors. 3000 new schools will be established by the government, while the private sector will be encouraged to set up 1500 new schools with the aid of incentives. The girls to boys school ratio for these new schools will be kept at about 60%.

Table 5 then costs the establishment of these 4500 new schools over the SAP period. The new five class schools to be established in the public sector will have a mean development unit cost of Rs 1.0 million. This unit cost is based on mean unit cost of Rs 0.2 million per classroom. So the 3000 new public sector schools will have a total development cost of Rs 3 billion. The mean recurring cost per school per year is Rs 0.107 million. This gives a total recurring cost for old plus new schools of Rs 6.7 billion.

The private schools are to be encouraged by means of a Frontier Education Foundation giving grants to them. This will be endowed with seed capital of Rs. 100 million.

Teacher Training

The SAP target for schools will give us the number of teachers required for these schools. Table 6 shows that the current demand for teachers is based on a teacher school ratio of 2. In a primary school containing 5 classes, this implies a teacher class ratio of 0.4. This teacher class ratio is untenable for two reasons. One, there is a pedagogical need for a one teacher per class. Two, the low teacher class ratio is what leads to the low number of children per class seen above. Allocating one teacher per class, will allow a doubling of the class size from 15 to 30, that was required above. And this halving of the number of schools required will be more cost effective despite the 250% increase in the number of teachers required.

Accordingly in Table 6, we have increased the number of teachers per school to five, giving one teacher per class. If the public sector has to fund 3,000 new schools, then this will generate a demand for 15,000 new teachers.

The training of 15,000 new teachers will require the setting up of a large number of teacher training colleges. The existing teacher training colleges only have a capacity for 2600 pre service trainees, and another 1800 in service trainees. The optimal use of existing capacity will still leave a requirement of training facilities for about 10,600 teachers. The current ratio of trainees will require about 73 new teacher training colleges.

The unit cost of teacher training is Rs. 20,000, with equal development and recurrent components. This gives a total cost of teacher training of Rs 300 million.

Female Literacy

The female literacy project aims to create 72,000 literate over the SAP period. This is estimated to require 18000 literacy centers, each producing 40 literate. To minimize the cost of the project, no new literacy centers will be constructed. Instead these literacy centers will be housed in existing schools and government buildings. The expenditure incurred will be on two instructors per center, and study materials.

Table 7 gives the cost of this female literacy project. The development cost is kept low at Rs 3 million. The recurring cost is higher at Rs 28 million. This gives a total cost of 31.1 million.

Education Department Support

The Education Department lacks critical capability for planning, managing, and monitoring education projects. To meet these needs Table 8 sets out a development budget of Rs 4 million, and a recurring budget of Rs 1 million. This gives a total budget of Rs 5 million.

The Role of the Community in Education Sectors Projects

Out of the four projects prioritized by SAP in the NWFP, there is potential for the community to get involved in two, primary schools and female literacy. The provincial government clearly does not have the organization in place to involve the community, as not have the organization in place to involve the community, as argued in Chapter 1 above. However the government has approached the NRSP to identify the social sectors in which they may be able to involve the community. NRSP's dialogue with the communities will determine their social preferences. Conceivably, communities whose basic survival needs are being met through health and drinking water facilities will demand primary education and literacy.

In this case, the involvement of those communities can be initiated through a phased process as argued in Chapter 1. The community is the best placed, in terms of proximity, and self interest, to monitor the establishment and running of facilities. This also demands the lowest level of skills, and organization of the community. Therefore the involvement of the community in it's own social services can ideally begin with their monitoring and evaluation of the establishment and running of the new schools and literacy.

Our suggested method for community monitoring and evaluation is to constitute village boards comprising of users, in this case parents, to whom the task is delegated. As the organization, skill, and empowerment of these boards increases over time, they can become participate in the more demanding project phases of identification, financial Conceptualization, managing the establishment, and the running of their schools and literacy centers.

Table 1: NWFP SAP Education Budget

(Rs in million)

Budget	Benchmark 1991/92	1992/93	1993/94	1994/95	Total SAP
Development	710	1080	1330	1350	3760
Recurrent	1560	1828	2014	2223	6061
Total	2270	2904	3344	3573	9821

Table 2: NWFP SAP Education Targets

	SAP Target 1995	Increase 1992-95	Post SAP 1998	Target Increase 1995-98
Enrolment (%)	77.4	22.8	100.0	22.6
Enrolment No (million)	2.04	0.71	2.856	0.816
Cost (Rs million)	3760		4321	

Table 3: Project Allocations of SAP Educational Budget

(million Rs)

	Development	Recurrent	Total
Primary School	3100	6660	9760
Teacher Training	150	150	300
Female Literacy	3	28	31
Education Department Support	4	1	5
Other Projects	503		
Total	3760	6839	10599

Table 4: Number of Primary Schools

	Schools	Children (M)	Children/ School	No. of Classes	Children/ Class
Existing No.	18,000	1.330	75	5	15
SAP	(4500)	(0.7)			
SAP+Post SAP	10,000	1.5	150	5	30
Post SAP	(5500)	(0.8)			
SAP: Public Sector	3000				
Private Sector	1500				
Total Planned	4500				

Table 5: Cost of Primary Schools

Required SAP Schools	3000
Development Unit Cost (5 class school)	Rs. 1.0 million
Total development cost	Rs. 3000 million
Recurrent cost per school (3 years)	Rs. 0.107 million
Total recurring cost of New Schools	Rs. 963 million
Total recurring cost for old + new schools	Rs. 6741 million
Education Foundation for Public School	Rs. 100 million

Table 6: Cost of Teacher Training

	Teachers/ Schools	Teachers/ Class	New Schools	Required Teachers	Unit Cost Dev.	Unit Cost Non Dev.	Total Cost (M. Rs)
Current No.	2	0.4	3000	6000	10,000	10,000	120
Optimal SAP	5	1	3000	15,000	10,000	10,000	300

Table 7: Cost of Female Literacy Program

Development Cost	2.7 million
Recurring Cost	28.4 million
Total:	31.1 million

Table 8: Cost of Strengthening Education Department

Development Cost	3.5 million
Recurring Cost	1.0 million
Total:	4.5 million

The Health Sector

The Current Situation

The current situation in the health sector is not very different from the situation in general within the social sector. Health services have failed to reach the most vulnerable population (women and children) in need of services. In spite of the relative success of the UNICEF sponsored polyimmunization program, the infant mortality and morbidity remains high. Though the government has ensured a high rate of coverage of the union councils by BHUs the maternal care preventive services have failed to reach the village level with the result that mortality remains high.

In short the current situation is characterized by two main factors, one that socio-cultural factors and problems intrinsic to the provincial health care system have been unable to increase the coverage of services especially for the most needy, an second that government sponsored health

care services have failed to evoke an acceptable response from the community with the result that the existing health facilities remain underutilized.

The table below, gives a detailed picture of the performance indicators for the health sectors current situation.

Table 1: A Comparison of National Vital Rates for Health and NWFP

Vital Rates	Pakistan	NWFP
CBR	38.99	39.70
CDR	10.00	10.20
RNI%	02.90	02.90
GR%	02.95	02.80
TFR	06.00	06.20
LIFE EXP.	60.75	60.40
IMR	88.00	89.50
MMR/1000	5-7	6-8

The reasons giving rise to such a health situation can be mainly ascribed to the provincial health care system. These can be broadly divided into:

- 1 Inadequate management capacity to run the health care system.
- 2 Lack of district level planning (Inadequate decentralization).
- 3 Inability to involve the grass root level community.

The overall direction of health sectors for the social action program has been determined by the need to reach the most vulnerable group of the population. The social action plan in the health sector has been designed to reach women and children and solve the problems intrinsic to the health care system through specific strategies. In other words the efforts are aimed both at improving the coverage, and improving the quality and acceptability of the government run health care services.

Briefly then, the strategies aimed at improving the managerial efficiency are mainly channelled through training and education of the health managers including efforts to bring about institutional change. Development of district and provincial health development centers is the main strategy to initiate district level planning and implementation.

Recruitment and training of the community health workers, inclusion of non governmental organizations in district health boards are mainly aimed at improving the level of grass root level participation.

Additional details on the sectoral plans in terms of physical targets are in the annex on health sector.

Specific Strategies in the Social Action Program (SAP)

In the Health Sector inclusion of the following areas has been proposed in the Social Action Program:-

- I. Expanded Poly- Immunization Program.
- II. Control of Diarrhoeal Diseases.
- III. School Health Service.
- IV. Establishment of Health Foundation.
- V. Rehabilitation of Drug Addicts.
- VI. Nutrition Program.

- VII. Building new BHUs and improving the existing BHUs and RHCs.
VIII. Training of CHWs and TBAs.

The implementation of the Program is likely to achieve the following targets:-

- i. *E.P.I*
 - a. 90% coverage and sustainability of one year old children.
 - b. Alimentionation of Neonatal Tetanus by 1995.
 - c. 90% reduction in measles, morbidity and 95% reduction in mortality.
 - d. 90% reduction in morbidity of women of child bearing age from tetanus and 95% reduction in mortality.
- ii. *Control of Diarrhoeal Diseases (CDD)*
 - a. 50% reduction of child deaths.
 - b. 25% reduction in the incidence of Diarrhoeal Diseases.
 - c. Establishment of Diarrhoeal Therapy Units in all the health outlets.
 - d. Supply of ORS to all health units.
 - e. Launching of health Education program, including promotion of breast feeding.
- iii. *School Health Services*
 - a. All the School going children of 5-16 years will be screened for early detection of any illness.
 - b. First aid and treatment of minor ailments will be arranged in the Schools.
 - c. The cases of major illnesses will be referred to the appropriate health institutions.
 - d. Record of health status of students will be kept during their stay in schools.
- iv. *Health Foundation*
The draft ordinance for the establishment of Health Foundation in NWFP has been prepared and submitted to the law Department for vetting before the same is presented to the Provincial Assembly for approval.
- v. *Rehabilitation of Drug Addicts*
At present drug addicts, treatment and rehabilitation facilities are available in seven districts. In view of the expanding dimensions of this addiction it is proposed to establish these facilities in the remaining 10 districts and to improve the existing facilities.
- vi. *Nutrition Program*
Malnutrition remains a major childhood problem. The provincial administration is taking a keen interest in ensuring that the children get adequate food and match the calorie intake with their daily activities. For details see annex.

Table 2: Financial Phasing and Development Allocation for the Specific Programs in the Health Sector

Program	(million Rs)			
	92-93	93-94	94-95	Total
EPI	38.00	38.00	38.00	114
Health Foundation	26.50	26.50	26.50	79.5
O.R.S.	03.36	03.36	03.36	10.1
School Health services	05.00	05.00	05.00	15
Nutrition Program	13.33	13.33	13.33	40
New BHUs	32.00	36.00	46.00	114
Upgrade BHUs	56.00	60.00	65.00	181

Continued.....

Program	92-93	93-94	94-95	Total
TBA training	02.50	02.50	02.50	7.5
CHW training	-----	04.00	05.60	9.6
Upgrade RHCs	10.00	11.00	12.00	33.0
New Urban Health centers	06.00	20.00	25.00	51.0
Rehab. of Addicts	04.33	04.33	04.33	13
Total	197.02	224.02	246.62	667.7

Rural Water and Sanitation Program

The benchmark population coverage for 1991-92 is estimated at 60% for potable water supply and 2% for sanitation. Targets for increased coverage between 1992-93 and 1994-95 are an additional 10% population for water supply and 15% for sanitation. Estimated costs for achieving targets are given in Table 1-5. It is proposed that additional population coverage be uniformly spread across all districts as far as possible.

To meet these targets over 500 water schemes and more than 250 sanitation schemes will have to be implemented over the three-year period. The Public Health Engineering Department (PHED) has considerable experience in planning and executing water supply schemes. Rural sanitation is a new area for PHED. The proposed increase in water and sanitation schemes will require administrative and technical strengthening of PHED. Some proposals are given in the annex.

Efforts are underway to involve local bodies so that communities can participate in preparation and implementation of scheme. It is also proposed that responsibility for operation of schemes. It is also proposed that responsibility for operation and maintenance be gradually transferred to local bodies. This process should begin with some of the smaller new schemes. Village Development Organizations (VDO) will be created for securing active community participation in all aspects.

A critical problem is that water use charges are presently able to meet only a minor proportion of the substantial O&M expenses. A revised water tariff is proposed (annex). Charges for households with tap connections would be doubled. For the first time a charge would be imposed on households using standposts. Both aspects will require considerable persuasion, and VDOs will have to play a central role in effective implementation of the new tariff. However, even with the higher tariff the projected revenues will be less than half of the estimated O&M expenses for 1992-93.

Table 1: NWFP Rural Water and Sanitation Targets

	1991-92	1994-95	Change
Water Supply Coverage			
Persons (m)	7.590	9.572	1.982
Proportion (%)	60	70	10
Sanitation Coverage			
Person (m)	0.253	2.325	2.072
Proportion (%)	2	17	15

Table 2: NWFP Water & Sanitation Development Expenditures
(million Rs)

	1992-93 to 1994-95
New Water Supply Schemes	1994
New Sanitation Schemes	829
Rehabilitation & Improvement	203
Supporting Measures	121
Total	3147

Table 3: NWFP Water & Sanitation Development Funding
(million Rs)

	1992-93	1993-94	1994-95	Total
ADP Allocation	308	600	656	1564
Additional Funding	421	522	640	1583
Total	729	1122	1296	3147

Table 4: NWFP Water & Sanitation Annual Expenditures
(million Rs)

	1992-93	1993-94	1994-95	Total
Development	729	1122	1296	3147
Recurring	237	296	355	888

Annex

Health Sector

Rural Health Services

By the end of 30th June, 1992, 342 Dispensaries, 36 sub centers of Health, 691 Basic Health Units, 73 Rural Health Centers and 42 Sub-Tehsil Hospitals were functioning in the rural areas of N.W.F.P. The aforesaid facilities are serving 9.913 million of the estimated 13.023 million rural population of the Province. Thus the Basic Health coverage of the rural population is 76.1%.

- 1 The coverage through 342 dispensaries is estimated at 3000-population per dispensary.
- 2 The average coverage through 36 Sub-Centers of Health, is estimated at 5000 population per unit.
- 3 The coverage through 691 Basic Health Units is estimated at 7000 population per unit.
- 4 There are 73 Rural Health Centers in the Province. The average coverage has been estimated at 30,000 population.
- 5 The coverage through 42 Sub-Tehsil Hospitals has been estimated at 40,000 population per hospital.
- 6 Residences for doctors have been constructed in 474 existing Basic Health Units where this facility was not available.
- 7 Complete dental units have been added in all the existing 73 Rural Health Centers.
- 8 X-Ray facilities have also been provided to 8 Rural Health Centers.
- 9 The Third Health Project of Asian Development Bank was approved at a cost of Rs. 360.092 million. The project is scheduled for completion by 1995. The scope of work in NWFP under this project is as under:-
 - a. Improvement of 68 Rural Health Centers (by adding 14 bedded ward, X-Ray, M.C.H. Facilities and a labor room).
 - b. Upgradation of 14 Small Health facilities to the level of Rural Health Centers.
 - c. Construction of 43 Residences for doctors.
 - d. Improvement of Public Health School, Peshawar by constructing a 25 room hostel for Nurses, class rooms and Clinic.
 - e. Nurses Home for 50 Nurses in Lady Reading Hospital, Peshawar.
 - f. Hostel for 280 Student Nurses in Lady Reading Hospital, Peshawar.
 - g. Constructing Services for the Postgraduate College of Nursing, Peshawar.
 - h. Consulting Services for Inservice Training and Manpower Development.
 - i. Providing teaching aids and material to all the Nursing Schools.
 - j. Strengthening of Planning Cell of Health & Social Welfare Department, Government of N.W.F.P.

The Family Health Project of World Bank has recently been approved by the CDWP at a cost of Rs. 629.772 millions. The Project is schedule for completion by 1998. The scope of work in NWFP under this project is as under:-

ITEM	NUMBER (NWFP)
Health Services Development	
i. Renovation & Strengthening of Tehsil Headquarter Hospitals.	10
ii. Strengthening of Referral and Emergency Care System by Providing:-	
a. Ambulances	40
b. Telephone facilities	30
c. Telecommunication facilities	56
iii. Strengthening of Mother & Children Health Care Services by providing Labor suites in Health Institutions.	27
iv. Strengthening of Family Planning Services in Health Institutions.	
v. Strengthening of Health & Nutrition Education Units at:-	
a. Provincial level	1
b. Divisional level	6
c. Establishment of District Units	15
vi. Providing diagnostic, laboratory and other essential equipment & Transport to Health Institutions.	
a. Ultrasound for DHQ Hospital	12
b. Generators for DHQ Hospital	18
c. Microscopes	340
d. T.B.As Kits	2100
e. Community Health Worker's Drugs Kits	300
f. TBAs Teaching Equipment	27
g. TBAs Linkage Kits	2100
h. Equipment for BHUS & MCH Centers	400
i. Bicycles for CDC Workers	500
j. Moped	90
k. 10% Spare Parts	
Institutional Development	
i. Improvement of Health Office of:-	
a. Divisional Directors Health	6
b. District Health Officers	8
ii. Strengthening of Planning Cell of Health Department	1
iii. Establishment of Health Development Centers.	
a. Provisional	1
b. Districts	15
iv. Renovation of Para-Medical School Saidu Sharif, Swat District.	1
v. Improvement of Nursing School at Kohat	1
vi. Establishment of combined Nursing & KHV Training Schools at Mardan & D.I.Khan with hostels for 90 Students.	2
vii. Establishment of Nursing School at Saidu Sharif Swat District	1
viii. Housing facilities for 4 Nursing/LHVs Training Schools.	
a. Category-III residences for	
- Principals	6
- Tutors/Instructors.	12
b. Category-V residences for staff of BPS 10 & 11	12
c. Category-VI residences for Anxiliary staff	

	of BPS 1-14.	12
ix.	Inservice and pre-services training of Health Manpower. (Number to be trained)	
	a. Master trainers (Initial)	99
	b. Master Trainers (follow-up)	544
	c. Doctors (Male & Female)	560
	d. Nurses	560
	e. LHVs	560
	f. Paramedics	504
	g. Microscopist/Malaria Supervisors	280
	h. T.B.As	1400
	i. Community Health Workers	350
	j. Nutrition Educators	420
	k. Health Educators	840
	l. Health Education (Overseas)	14
	m. Planning & Development Personnel	210
x.	Implementation Unit (P.I.U) for the Family Health Project NWFP.	1

General Hospitals

At present there are 10 District Headquarter Hospitals, 13 Tehsil Headquarter Hospitals, 42 Sub-Tehsil Hospitals, One Leprosy Hospital and 16 T.B. Hospitals/Clinics in N.W.F.P.

- a. By the end of June, 1992 the number of beds in these hospitals was 8061.
- b. Dental Clinic, X-Ray Blocks, Operational Theatres, Laboratories, OPD Blocks, additional wards, waiting sheds and Blood have been established in the hospitals where facilities were not available.
- c. Building of some existing hospitals, which were in a dilapidated condition have also been re-considered.
- d. To solve the residential problem 360 residences for doctors and para-medical staff have been constructed in the existing hospitals.
- e. Equipment and X-Ray Plants have also been provided to most of the hospitals where these facilities were not provided.
- f. To provide specialists in the field of Medicine, Surgery, Gynea/Obstetrics and Paediatrics at Tehsil level, equipment and additional beds have also been provided to some hospitals. This program of improvement of Hospitals will continue in a phased manner till all the Tehsil Headquarter Hospitals are covered.
- g. Ten new 200 bedded District Headquarter Hospitals will be established at Nowshera, Swabi, Kohistan, Karak, Lakki Marwat, Kohat, Mardan, Tank, Haripur and Buner. The schemes are under preparation and necessary allocation has been provided in the ADP 1992-93.
- h. After the construction of new building for the DHQ Hospitals (as indicated in Para 19) the Old Civil Hospitals will be converted into Women and Children Hospitals.
- i. In the existing hospitals, the bed occupancy rate in Gynea and Obstetrics and Paediatrics Wards is 100%. Therefore, it is planned to establish a 60 bedded Women and Children Hospital at Divisional and District level with all modern facilities. At present a 200 bedded Women & Children hospital is functioning at Abbottabad while a 100 bedded Gynea & Paediatric Block is under construction at District Headquarter Hospital Mardan. Similarly Hayatabad Medical Complex would be made functional in near future with 100 beds each for Gynea & Obstetrics and Paediatrics. A new 200 bedded hospital is also under-construction at Kohat in which enough beds will be allocated for the Gynea & Obstetrics and Paediatrics.
- j. The scheme for the purchase of land for the establishment of a 500 bedded hospital at Peshawar has also been approved and funds provided under the New Provincial Initiatives Program 1992-93.

- k. Funds have also been allocated for the purchase of land for the establishment of a 200 bedded hospital at Peshawar with the financial assistance of the Islamic Mission Hospitals Trust.
- l. The standardization of Tehsil and District Headquarter Hospitals in another important medical step towards the provision of better and adequate medical cover to the public. It has been decided that the bed strength of Tehsil and District Headquarter Hospitals will be 150 and 350 respectively. The bed strength of a District Headquarter Hospital may go upto 500, keeping in view the population and present bed occupancy rate. Therefore, new schemes for provision of additional beds, with all other necessary requirements which are not available at present, have been included in ADP 1992-93.
- m. Lady Reading Hospital, Peshawar
The following new buildings are under-construction in Lady Reading Hospital, Peshawar:-
- i. New O.P.D Block
 - ii. 200 bedded Eye/ENT Block
 - iii. A new 300 bedded Gynea & Obstetrics and Paediatrics Block. After the completion of Eye/ENT, Gynea & Obstetrics and Paediatrics Block the bed strength of the hospital will increase from 1150 to 1600.
- n. Hayat Shaheed Teaching Hospital
The main hospital complex, with residential area has been completed. Some new residential and non residential areas will be added in future. The present bed strength of the hospital is 100 with all major and sub-specialities.

Medical Education and Training

A new Mortuary and Toxicology Laboratory has been constructed in Khyber Medical College, Peshawar. Improvement and expansion in Khyber College of Dentistry has also been completed during 1991-92. The construction of an Examination Hall in Khyber Medical College, Peshawar has been started during 1991-92.

Scholarships and Stipends

During 1992-93 Rs. 22.619 million would be utilized for award of scholarships and stipends to under-training Nurses, Lady Health Visitors, Nurse Aid Midwives, TBAs, Dais, Medical Technicians and Para-Medical Trainees; included merit scholarships to the students of Khyber Medical College, Peshawar and Khyber College of Dentistry, Peshawar.

Miscellaneous

Poly Immunization Program

- a. This program is assisted by the WHO and UNICEF. Under this program children are immunized against the common childhood infectious diseases. These diseases are:-
- i. TB
 - ii. Polio
 - iii. Whooping Cough
 - iv. Diphtheria
 - v. Tetanus
 - vi. Measles
- b. The program is included in the 7th Five Year Plan (1988-89) to (1992-93). It is providing immunization coverage to new born (0-11) months children, pregnant women and child bearing age women i.e. those of 15-45 years, through 580 fixed centers and 40 Mobile Teams. Apart from this Federal Government/WHO introduced Hepatitis 'B' vaccine in the Pilot Project areas of Mardan, Peshawar and Malakand Division from 1.9.1990. In addition to the above program ORS Packets are also distributed by E.P.I. Staff.
- c. The Targets and Achievements for 1991-92 are as under:-

Item	Targets	Achievements
0-1 Years	496,000	4,77,000 (96.0)
Pregnant Women	620,000	3,90,000 (62.9)

- d. It is a fact that T.T coverage of pregnant women was at the lowest level viz 6% in 1984, mainly due to social behavior and cultural obstacles. The Majority of the people do not like to get their women immunized by male workers. The EPI organization took serious note of it and approached the Government very generously sanctioned a staff of 150 female workers for T.T vaccinations. Since the induction of female staff outstanding results have been achieved, which is evident from the above table. In the first attempt the team concentrate on low coverage areas in the densely populated areas and in later on cover the sparsely populated areas. New born Children are also vaccinated by these teams sent from the Provincial Headquarter.

T.B Control Program

- a. Immunization against T.B is carried out under the EPI Program described above. The other component of the T.B. Program is detection of T.B. Patients and their treatment, Effective detective is carried out by examining the sputum of all the coughing patients for T.B. germs. This is the most convenient and cheap method for diagnosis of TB patients. All the Laboratory Technicians working in the Rural Health Center and Hospitals have been trained in the examination for the treatment of T.B Germs. UNICEF used to provide medicines for the treatment of T.B. patients but the supply has been stopped since 1981. Now this expenditure is met out of the Provincial budget. These activities are carried out under the control of a T.B. Officer at District level and overall supervision of the Provincial T.B. Control Officer.

Leprosy Control Program

Leprosy is not very common but it is present in NWFP. Most of the cases are in the Northern hilly districts. The Government is implementing the Leprosy Control Program with the assistance of voluntary agencies. The total number of leprosy patients detected in NWFP and FATA are 4412. The following facilities are available for the control of leprosy:-

	Government	Private
i. Hospitals	Balakot (50 beds)	Peshawar (20 beds)
ii. Leprosy (cont units)	28	2
iii. Leprosy Technicians	14	5

Nutrition Program

Inspite of general availability of food, Malnutrition in Pakistan including NWFP is major public problem as indicated by the following figures.

Malnutrition in Pregnant and Lactating Women	
- Under Weight for height	34%
- Severely underweight for height	6%
- Anaemic (HB less than 11 gm%)	45%
- Severely anaemic (BH less than 9 gm%)	10%

Malnutrition in Children Under 5 Years of Age

- Low weight for age	48%
- Very low weight for age	10%
- Stunting (low height for age)	56.8%
- Wasting (low weight for height)	15%
- Acute malnutrition	20%
- Anaemic infants (HB less than 11 gm)	65%
- Severely anaemic (HB less than 9 gm)	28%

In addition Iodine deficiency is prevalent in Malakand and Hazara Divisions of NWFP.

Malnutrition is the result of insufficient/unbalanced intake of food which does not meet the protein, energy and micro-nutrient requirements of the body. This is due to;

- Lack of knowledge about quality and quantity of food requirements.
- Decline in breast feeding and poor weaning practices.
- Maldistribution of food in the family. These requiring most get the least.
- Poor food hygiene, insanitary environment.
- Lack of clean drinking water leading to gastrointestinal diseases.
- Low utilization of health services.
- Low financial capacity for purchasing food.

Strategy for Improving Nuttition Status of Pregonant and Lactating Women and Children.

- a. Nutrition surveillance of pregnant/lactating women and children.
- b. Nutrition research to identify causes.
- c. Introducing applied nutrition in general education.
- d. Steps to increase knowledge about nutrition in public through various channels of information.
- e. Integration of nutrition and MCH.
- f. Targeting food subsidies.
- g. Training of female paramedics & TBAs in nutrition advise women in nutrition.
- h. Approximate number of CBAW and children in NWFP - 30,00,000.

Proposed Details of the Scheme E.P.I

In order to achieve 100% protection against 6 preventable diseases of child-hood and 100% protection of women of child bearing age against tetanus following measures are proposed.

- a. Creation of 500 posts of female EPI technicians, 10 posts of drivers and 2 posts of Junior Clerks.
- b. Provision of 10 long size vehicles, 100 electric Generators, and 15 refrigerators.
- c. Provision of disposable syringes.
- d. Training of EPI workers.

Proposed Details of the Scheme Control of Diarrhoeal Diseases

Target by 1995 are:

- 50% reduction in child deaths due to diarrhoea.
- 25% reduction in incidence of diarrheal diseases.

To achieve the above targets following actions are proposed. The program will include the following:

- a. Establishment of ORT corners.

- b. Provision of ORS packets.
- c. Training of doctors for CDD.
- d. Training of paramedics.

Proposed Details of the Scheme School Health Services

At present 256 posts of male and 45 posts of female School Health Medical Officers have been sanctioned but the program is not yet properly implemented due to logistic constraints.

Following measures are proposed to make the program effective.

- a. Provision of 3 Suzuki Vans for each district at a cost of Rs. 0.200 million per Van costing Rs. 10.4 million (0.20 X 3 X 17)
- b. Diagnostic, First Aid and other equipment at Rs.1000/- per set costing Rs. 0.68 million (1000 X 4 X 17) for 4 sets per district.
- c. Stationary at Rs. 5000/- per district costing Rs. 0.85 million (5000 X 17).
- d. P.O.L for 52 Vans for 180 working days at Rs. 200/- per day costing Rs. 1.872 million (52 X 180 X 200).

Proposed Details of the Scheme Narcotic/Drug Addicts Rehabilitation Facilities.

There are about 300,000 addicts in NWFP and the number is on the increase. At present centres at the following places are providing detoxification and rehabilitation facilities to drug addicts.

	Beds	Monthly turn Over of patient
1. L.R.H Peshawar.	10	30
2. H.S.T Hospital Peshawar.	10	30
3. C.H Peshawar.	10	30
4. DHQ Hospital Mardan.	10	30
5. DHQ Hospital Mansehra.	10	30
6. DHQ Hospital Kohat.	8	24
7. DHQ Hospital D.I.Khan.	8	24
8. DHQ Hospital Charsadda	10	30
9. SG Hospital Swat	20	60

The existing facilities are not sufficient and it is proposed to establish Drug Addiction Treatment Centers, in each district and to expand the existing facilities.

NWFP Rural Water Supply and Sanitation

Revised Water Tariff			
	Rate Schedule	Existing	Proposed
1.	Initial connection fee	Rs.100/-	Rs. 250/-
2.	Half inches domestic water connection	P.M.	P.M.
3.	Stand Post users per house	Nil	Rs. 5/- PM

Assuming improved collection system and approval of the proposed water tariff from Cabinet, following water charges return scenario should emerge:

1992-93 Estimates of Revenue Population (000):

1. Population being served	=	7421.630	
2. Population served through system based on house connection:			
a. Community users	=	3780.978	
b. House hold users	=	667.947	
3. Population getting service from community based system	=	2968.652	
4. No. of House getting service from community system	=	424100	
5. Water Charges estimates:			
- House hold uses @ Rs.40/- P.M./House	=	45.80	M
- Community Users @ Rs. %/- P.M./House	=	62.796	M
Total	=	108.596	M
6. Assuming 80% overall efficiency of the Collection system, amount expected to be collected	=	Rs.86.876	M

Operation & Maintenance Expenditure

(million Rs)

No. of Schemes	Annual expend	Annual	Water increase (%)	Charges
1987-88	1245	67.712	18	11.010
1988-89	1438	93.909	39	11.093
1989-90	1527	109.135	16	12.827
1990-91	1655	137.094	26	13.524
1991-92	1800	182.689	33	--

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O&M Charges (Rural Water Supply Schemes)

(million Rs)

No. of Scheme	Operational Staff	Electricity	Repair		Total
			Machinery	Civil Work	
1987-88	22.477	33.433	5.890	5.891	67.661
1988-89	33.200	47.792	7.096	5.821	93.909
1989-90	36.342	54.738	10.096	7.959	109.135
1990-91	41.300	75.487	11.988	8.319	137.094
1991-92	50.533	110.456	12.500	9.200	182.689

Institutional Strengthening, Supporting Measures and Financial Implications***Institutional Strengthening***

In order to bring this sector to face the existing and future challenges, the following restructuring is proposed.

The O&M responsibility by transferred to the users in phased manner starting from simple and small schemes with support of the community elders in making the beneficiaries to pay the water charges. The O&M cost of the remaining untransferred facilities to be recovered by revising the water service charges.

Enhancement in PHED's ability to handle effectively the increased volume of work load by the following steps.

- a. Separating PHED from Irrigation as an independent Department.
- b. Enlarging the existing Sanitation Division to a Circle of Sanitation immediately while another second one is proposed after July 1992. The two Sanitation Circles so proposed and the existing FATA Circle shall be grouped under the control of an independent Chief Engineer proposed to be created after July 1992. This Wing shall be gradually developed in future by upgrading its capabilities to a full fledged Sanitation branch like that of water supply (existing) within PHED. It will be responsible for the execution of Sanitation, Drainage and Sewerage projects all over the province.
- c. Separating O&M from the projects and providing the additional O&M staff at least to the SDO level in Division-wise basis for the remaining untransferred liabilities of PHED, so that improved water collection and maintenance arrangements could be had.
- d. Creating the post of a Coordinator for foreign assisted project with a Stenographer (BPS-15) for executing the foreign aided or sector related major projects in the province.

Additional Staff Requirement and its Financial Liabilities:

	(million Rs)
Chief Engineer (South) with allied staff	4.546
Director (HQ) with allied staff	0.242
Director W/S & Sanitation with staff	2.741
Director Coordination with staff	0.603
Training Officer with allied staff	0.502
Director Research with allied staff	2.027
Motivation Staff	6.466
Additional Staff (Tech/Revenue) in each Circle	4.124
Two PHE Division (Swabi & Haripur)	3.407
Four Sub Division for Swabi and Haripur PHD Divisions	2.918
11 O&M Sub Divisions	12.426
11 Sanitation Sub Divisions	12.426
Total Cost for one year	48.048
Add cost for two years	46.101
Total Cost for 3 years	94.148
Building	15.000
	109.148
Add 2% contingencies charges	2.195
Grand Total	111.343
Say	112.000

Equipment **Drilling Rigs**

The Department is in possession of 10 drilling Rigs. Private Sector however, is meeting the deficiency to a large extent. Drilling in difficult terrains, on account of limited capability of private sector, are generally attended with the department drilling rigs which is most of the cases have attained their useful life's spans.

Besides that horizontal drilling technique has so far not been achieved. At the moment, therefore, three drilling sets are taken on average with an average cost of Rs. 20 million per set.

$$\text{Drilling Set 3 Nos. @ Rs. 20 Million each} = \text{Rs. 60.00 million}$$

Laboratory Equipments

The existing capacity of PHED Laboratory shall require to be equipped where on Lump Sum basis provision is made for Rs. 6.00 Million.

Standby Pumping Units

More than 60% of the served population depends on pumping based schemes where from occurrence of break; down till arrangements of repair or replacement it takes on aver 10 to 15 days thereby posing serious inconveniences to the users. On average therefore, 2 units of standby are proposed per PHE Division at an average cost of Rs. 0.15 million per unit.

No. of Pump Units = No. of PHE Divn x 2 = 13 x 2 = 26

cost of 26 Nos of Pumps Units = 26 x 0.15 = Rs. 3.900 million

Also one pick-up, 4 wheel drive, for maintenance use is proposed in each of the PHE Division.

Cost of Pick-up @ Rs. 0.5 million
per No. = Rs. 6.500 Million

Equipment Abstract

Drilling Rigs (3 Nos)	= Rs. 60.00 Million
Laboratory Equipments	= Rs. 6.00 Million
Standby Pumping Units	= Rs. 3.90 Million
4 Wheel drive pick-ups	= <u>Rs. 6.50 Million</u>
Total	= Rs. 76.40 Million

Consultancy Services

Sanitation has largely been ignored in the past and is, therefore, considered by all concerned to be a new field. Besides that surface water treatment and transmission technology is to be made use of as previously almost all the schemes used to be based on ground water technology where ground water in most of the parts in southern districts is either depleting or turning into brackish.

Health hygiene education and community participation aspects in the sector are to be taken up actively besides the point that the population which has remained unserved is largely scattered located while the old schemes require improvement and rehabilitations are generally in need of higher engineering input. Consultancy services are therefore, proposed at the average rate of 1% of the physical measures cost.

Cost @ Rs. 1% of Rs. 2823 Million = Rs. 28.23 Million.