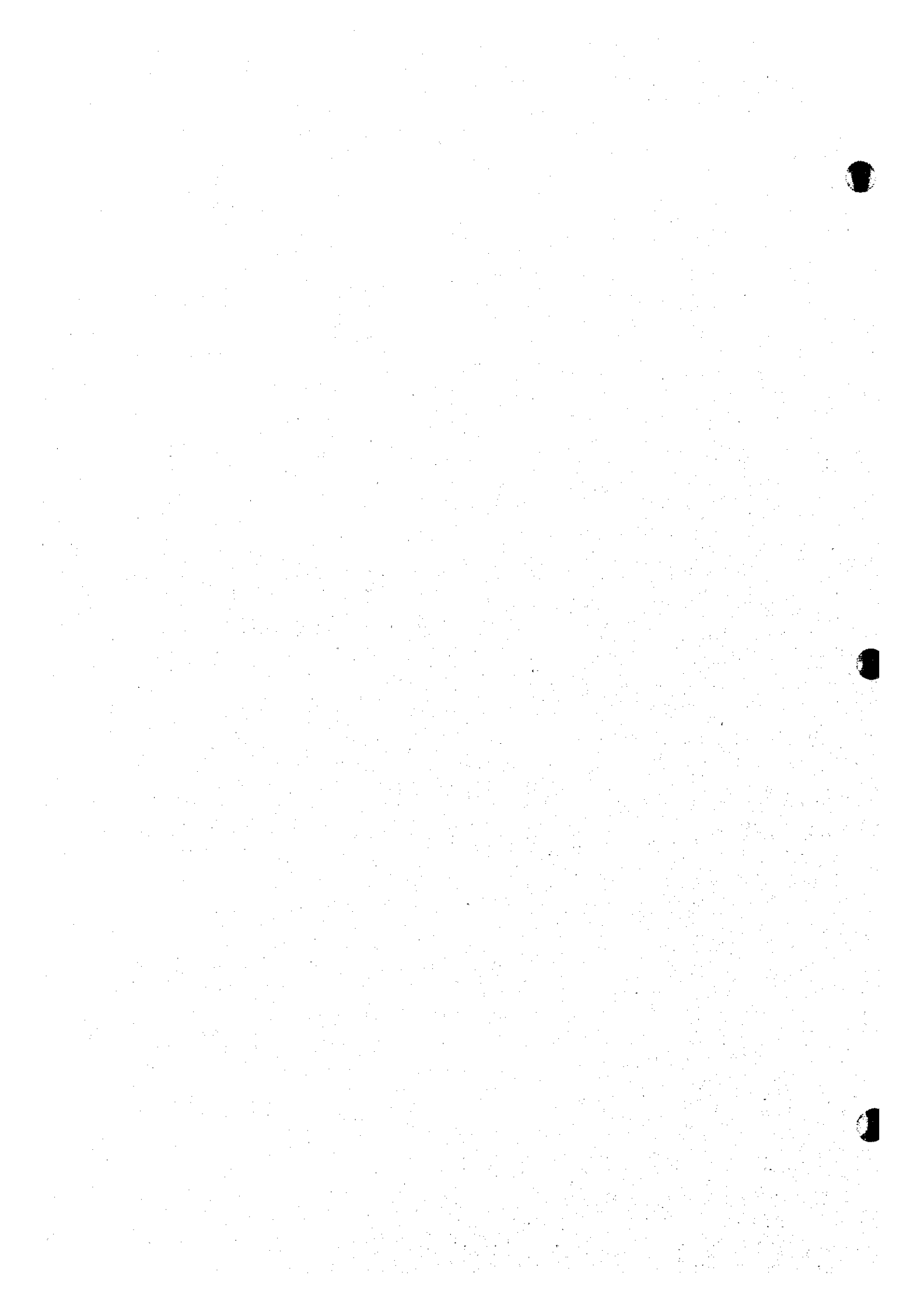


Chapter

**FINANCIAL ARRANGEMENTS FOR
MEDIUM-TERM DEVELOPMENT PLAN**

11



11. Financial Arrangements

11.1 General

Financial arrangements to attain medium-term (Phase I) targets are sought taking into account potential funds. However, quantitative study is limited to the use of projected Internal Revenue Allotment (IRA). In this connection, this Chapter addresses to identify financial shortfall with reference to available IRA for this sector and to seek comprehensive logistics in terms of acquisition of various funds, augmentation of current practices in the Government assistance to this sector and effective investments and cost recovery.

Available funds (IRA) during the medium-term development period are projected in use of computer-based programs that allow for the future application to include additional funds that are available. Figure 11.1.1 shows the sector budget allocation in the different administrative levels to come up with total funds available in the province. Figure 11.1.2 illustrates the manner of sector fund allocation to respective municipalities from the national and provincial governments with a detailed study flow availing IRA. Interfaces between provincial government and municipalities/barangays are also presented in the same figure.

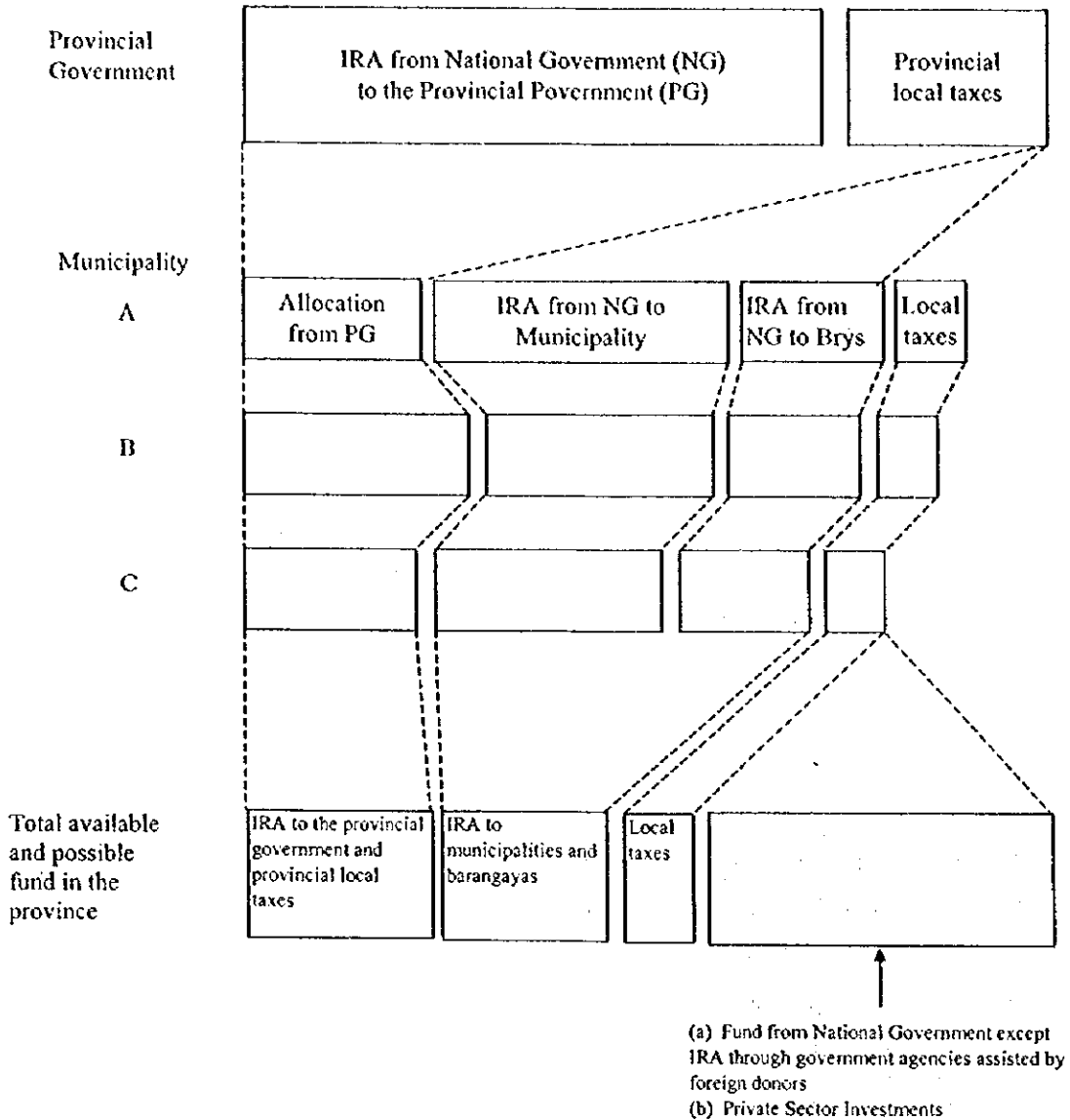
Distribution of IRA to respective municipalities is contemplated in assumption of various factors based on the experiences as of 1997.

The Investment Coordination Committee (ICC) of NEDA adopted a policy "to support the financing of devolved activities with social and/or environmental-objectives" based on three considerations, namely: Equity, Externalities and Economies of Scale. The new cost-sharing arrangement was put into practice this year, which clearly limited the national government subsidy for Level I water supply to 5th and 6th class municipalities up to a maximum of 50% of the total project cost. For sanitation facilities, the national government subsidy for 3rd to 6th class municipalities shall be from 50% to 70% of the total project cost. In this connection, financial study for Level I water supply and sanitation improvement was conducted for those municipalities meeting the above conditions.

11.2 Projection of IRA

The projection of IRA to the relevant sector for Phase I period is made covering different administrative levels. Current manner of allocation by the national government is directed to

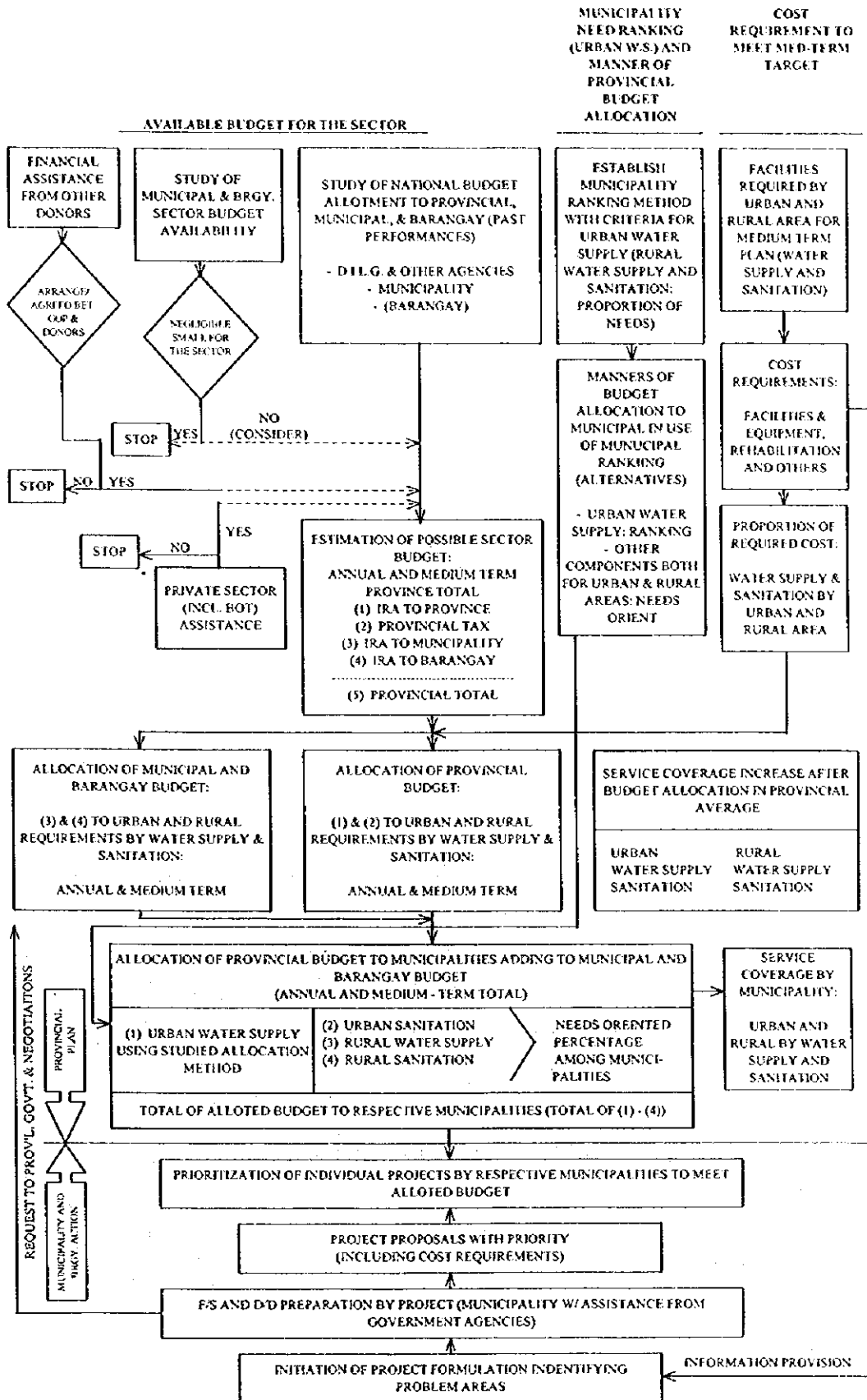
Figure 11.1.1 Sector Budget Allocation



Notes: (1) Budget from different sources in the figure above are those shared to water supply and sanitation sector from allotted amount for overall sectors.

(2) Shaded portion above is the potential fund source to be negotiated/arranged to meet target requirements.

**FIGURE 11.1.2
GENERAL FLOW OF FINANCIAL ARRANGEMENTS FOR RELEVANT SECTOR DEVELOPMENT**



three different governmental levels; province, municipality and barangay. Municipal fund available for this sector is calculated as a sum of municipal and provincial allotments. Figure 11.2.1 shows the calculation procedure with assumptions and Tables 11.2.1 and 11.2.2 present calculation results. Calculation process is further described as follows:

(1) Projection of annual IRA to all LGUs in the Philippines from 1999 to 2003

The IRAs come from 40% of past and /or projected national internal revenue taxes from 1996 to 2000 (3rd fiscal year preceding the current year). Projections for national internal revenue taxes. This ratio is based on the Local Government Code in 1991.

(2) Distribution of national total IRA to each administrative unit

Based on the Local Government Code, IRA is distributed by administrative level as follows:

Provinces	23%
Cities	23%
Municipalities	34%
Barangays	20%

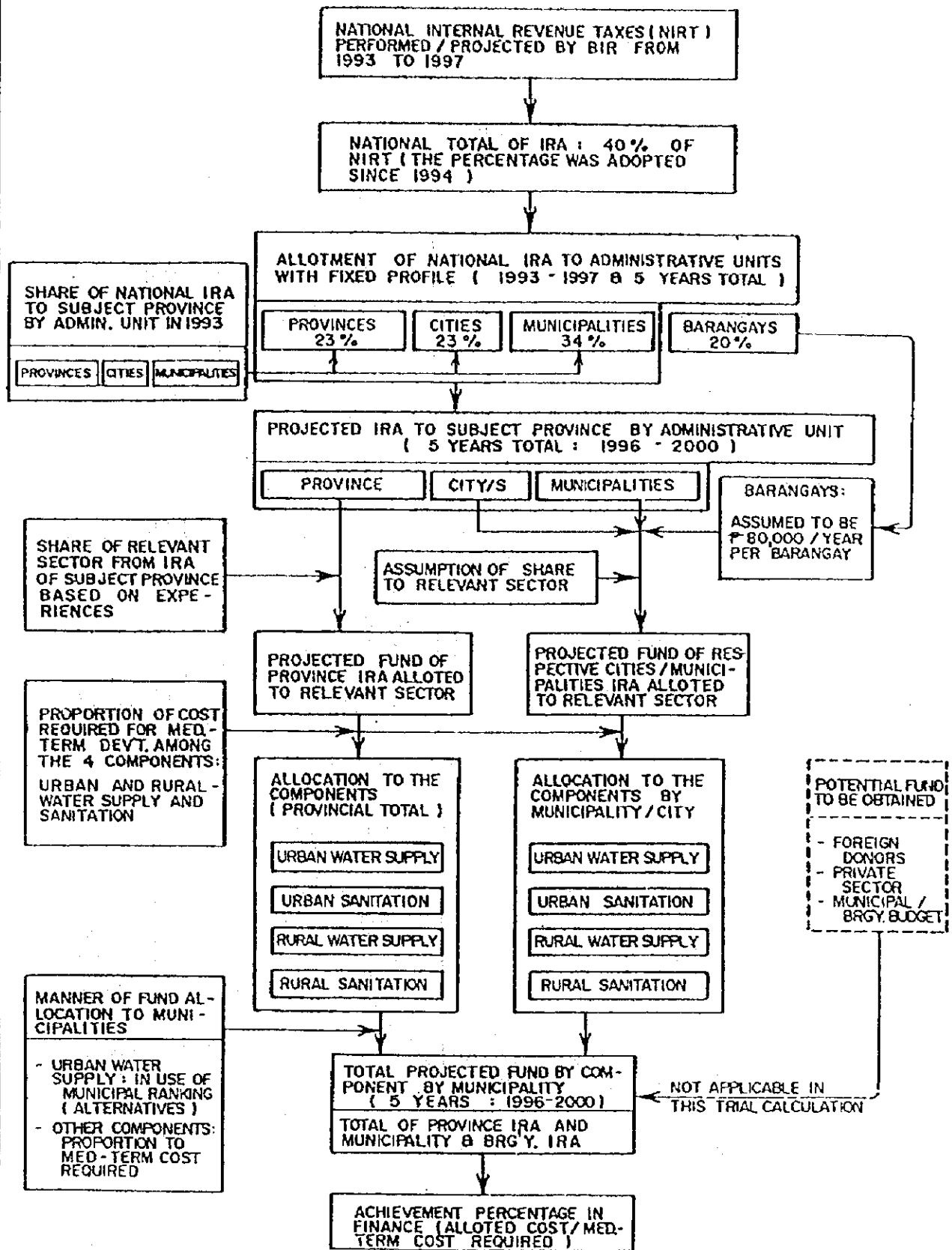
(3) Distribution of national total IRA to the subject province by provincial, municipal and barangay level

With reference to allocation of national IRA by administrative level, provinces and municipalities are based on weighted 3 factors: population, land area and number of administrative units. In this analysis, however, the distribution percentage experienced in 1998 is simply employed in projecting IRA for the period 1999-2003 (refer to Table 6.2.2, Main Report and Supporting Report). Allotments to barangays are added to the IRAs for municipalities (₱80,000 times the number of barangays).

(4) Projection of available IRA to the relevant sector by administrative unit of the province

According to the Provincial Annual Report in 1997, about 0.16% of provincial IRA was availed for the water supply and sanitation sector. Referring to the experience in other provinces, provincial allocation to the relevant sector is assumed to be 4%. This means

Figure 11.2.1 TRIAL ALLOCATION OF INTERNAL REVENUE ALLOTMENT (IRA) TO MUNICIPALITIES FOR RELEVANT SECTOR DEVELOPMENT



NOTE: BIR - BUREAU OF INTERNAL REVENUE (DOF)
 NIRT (1993 - 1997) IS THE BASIS OF NATIONAL TOTAL OF IRA (1996 - 2000)
 POTENTIAL FUND: NEEDS OF ADDITIONAL FUND ARE CONSIDERABLE. THIS REFERENCE INFORMATION IS SHOWN.

Table 11.2.1 Projected Internal Revenue Allotment for Medium-Term Sector Development

	Unit: P 1,000					Total
	1999	2000	2001	2002	2003	
1 40% of Actual/Projected National Internal Revenue Taxes of the 3rd Fiscal Year preceding the current year	94,880,480	104,049,760	115,801,280	127,449,920	142,317,600	584,499,040
2 Internal Revenue Allotment to all LGUs						
(a) province (23%)	21,822,510	23,931,445	26,634,294	29,313,482	32,733,048	134,434,779
(b) cities (23%)	21,822,510	23,931,445	26,634,294	29,313,482	32,733,048	134,434,779
(c) municipalities (34%)	32,259,363	35,376,918	39,372,435	43,332,973	48,387,984	198,729,674
(d) barangays (20%)	18,976,096	20,809,952	23,160,256	25,489,984	28,463,520	116,899,808
(e) total IRA to all LGUs	94,880,480	104,049,760	115,801,280	127,449,920	142,317,600	584,499,040
3 Projected IRA to Subject Province by Administrative Unit						
(a) province	242,656	266,139	296,197	325,992	364,021	1,495,035
(b) municipalities/city including barangays	587,148	640,535	708,956	776,729	863,344	3,576,761
Alegria	11,956	13,018	14,380	15,730	17,453	72,537
Bacuag	12,641	13,793	15,269	16,733	18,601	77,037
Basilisa (Rizal)	17,903	19,425	21,375	23,307	25,774	107,784
Burgos	7,826	8,536	9,446	10,348	11,499	47,654
Cagdianao	16,024	17,464	19,310	21,140	23,476	97,414
Claver	17,588	19,179	21,219	23,241	25,821	107,049
Dapa	15,357	16,617	18,232	19,832	21,875	91,914
Del Carmen	12,375	13,416	14,750	16,073	17,761	74,325
Dinagat	12,559	13,680	15,117	16,541	18,359	76,257
General Luna	12,054	13,072	14,377	15,670	17,321	72,493
Gigaquit	14,660	15,976	17,663	19,335	21,469	89,102
Libjo (Albor)	16,352	17,808	19,675	21,526	23,887	99,248
Loreto	14,833	16,189	17,927	19,650	21,849	90,450
Mainit	15,896	17,270	19,031	20,777	23,004	95,979
Malunono	13,366	14,549	16,066	17,569	19,458	81,037
Pilar	10,308	11,183	12,316	13,434	14,861	62,107
Placer	15,292	16,615	18,311	19,992	22,137	92,347
San Benito	8,678	9,470	10,485	11,492	12,777	52,902
San Francisco (Anao-Aon)	11,014	11,993	13,248	14,493	16,081	66,829
San Isidro	9,914	10,779	11,888	12,987	14,390	59,957
San Jose	15,081	16,446	18,195	19,929	22,142	91,793
Santa Monica (Sapao)	9,469	10,299	11,363	12,418	13,764	57,313
Sison	11,267	12,263	13,540	14,806	16,421	68,297
Socorro	14,552	15,858	17,532	19,191	21,308	88,441
Surigao City (Capital)	237,061	259,552	288,379	316,953	353,423	1,455,368
Tagana-An	11,531	12,537	13,827	15,105	16,736	69,736
Tubajon	10,291	11,216	12,401	13,576	15,076	62,559
Tubod	11,301	12,323	13,634	14,933	16,591	68,782
(c) Provincial Total	829,834	906,674	1,005,153	1,102,771	1,227,364	5,071,796
4 Project fund of IRA to Relevant Sector by Administrative Unit						
(a) province	9,707	10,646	11,843	13,040	14,561	59,801
(b) municipalities including barangays	23,486	25,621	28,358	31,071	34,534	143,070
Alegria	478	521	575	629	698	2,901
Bacuag	506	552	611	669	744	3,081
Basilisa (Rizal)	716	777	855	932	1,031	4,311
Burgos	313	341	378	414	460	1,906
Cagdianao	641	699	772	845	939	3,897
Claver	704	767	849	930	1,033	4,282
Dapa	614	665	729	793	875	3,677
Del Carmen	495	537	590	643	710	2,975
Dinagat	502	547	605	662	734	3,050
General Luna	482	523	575	627	693	2,900
Gigaquit	586	639	707	773	859	3,564
Libjo (Albor)	654	712	787	861	955	3,976
Loreto	593	648	717	786	874	3,618
Mainit	636	691	761	831	920	3,839
Malunono	535	582	643	703	780	3,241
Pilar	412	448	493	537	594	2,454
Placer	612	665	732	800	885	3,694
San Benito	347	379	419	450	511	2,116
San Francisco (Anao-Aon)	441	480	530	580	643	2,673
San Isidro	397	431	476	519	576	2,398
San Jose	603	658	728	797	886	3,672
Santa Monica (Sapao)	379	412	455	497	551	2,293
Sison	451	491	542	592	657	2,732
Socorro	582	634	701	768	852	3,538
Surigao City (Capital)	9,482	10,382	11,535	12,678	14,137	58,215
Tagana-An	461	501	553	604	669	2,789
Tubajon	412	449	496	543	603	2,502
Tubod	452	493	545	597	664	2,751
(c) Provincial Total	33,193	36,267	40,206	44,111	49,095	202,877

Table 11.2.2 Projected Allotment of IRA to the Relevant Sector by Component, 1999-2003

Unit: 1,000 peso

Province/Municipality	Urban Water Supply	Rural Water Supply	Urban Sanitation	Rural Sanitation	Total
1. Province	36,143	13,657	5,618	4,384	59,801
2. Municipalities					
Alegria		1,973	472	457	2,901
Bacuag	2,466	572	44		3,081
Basilisa (Rizal)	2,717	678	243	673	4,311
Burgos	1,414	25	359	109	1,906
Cagdianao	3,475	352	70		3,897
Claver	3,757	345	177	3	4,282
Dapa	1,937	360	978	401	3,677
Del Carmen		2,699	236	39	2,975
Dinagat		2,450	176	425	3,050
General Luna	1,731	549	365	254	2,900
Gigaquit	2,899	561	104		3,564
Libjo (Albor)	2,544	394	285	747	3,970
Loreto	2,393		1,128	96	3,618
Mainit	870	1,523	754	691	3,839
Malimono	2,818	96	184	144	3,241
Pilar	352	1,780	92	260	2,484
Placer		2,754	886	54	3,694
San Benito	1,189	917		11	2,116
San Francisco (Anao-Aon)	427	1,767	478		2,673
San Isidro		2,206	180	12	2,398
San Jose	3,192	478		2	3,672
Santa Monica (Sapao)		850	712	730	2,293
Sison	2,398		215	119	2,732
Socorro	888	1,335	635	679	3,538
Surigao City (Capital)		16,420	28,068	13,727	58,215
Tagana-An	407	537	1,006	840	2,789
Tubajon	1,987	200	196	119	2,502
Tubod			909	1,842	2,751
Total	76,007	55,477	44,570	26,818	202,872

that 20% of "20% Development Fund" from national IRA is counted on sector projects. The same percentage is applied for the allocation of municipal IRA to the sector.

(5) Available IRA of municipalities by sub-sector

Available municipal fund for the four components (urban and rural water supply, and urban and rural sanitation) is estimated as a sum of respective components in combination of those allocated from the province and distributed in each municipality. Distribution of sector total fund to sub-components both in the provincial and municipal levels is, in principle, arranged in proportion to the direct construction cost required for Phase I Development.

With regards to the distribution of provincial IRA for urban water supply to respective municipalities, weighing method with ranking is employed, which will be discussed in detail in Section 11.4. For the other components, provincial IRA is distributed to municipalities in proportion to their required costs in Phase I (refer to Table 11.2.2).

The provincial IRA to the sector during the period 1999-2003 is estimated at ₱59.8 million. In the municipal IRA, Basilisa has the largest IRA allotment with ₱4.3 million (3.0% to total municipal IRA) followed by the municipality of Claver (₱4.28 million). Projected IRA allotment to Surigao City is ₱58.2 million.

Urban water supply had the largest allotment with 38.4% of the total IRA (₱77.9 million out of the ₱202.9 million for the period 1999-2003). Rural water supply has 27.7% of the total IRA (₱56.2 million). Rural sanitation is allotted ₱25.5 million and is smaller than the allotment for urban sanitation of ₱43.3 million. As a result, about 60% of available IRA is allotted to urban sector. The proportion of IRA allotment for the sub-sectors differs by municipality and depends on their priority sub-sectors.

11.3 Additional Funding Requirements

Annual cost required for the whole province during the medium-term development is summarized in Table 11.3.1 referring to the study results in Chapter 10. The total cost required covers physical contingency; 10% of the direct cost and price contingency; 7% per year covering the direct cost and physical contingency and value added tax. Details of implementation arrangements for annual investment are shown in Table 11.3.1, Supporting Report. The required cost excluding price contingency was also shown in the Table to compare with available IRA on a current price level.

Table 11.3.2 presents additional funding requirements of the province on the current price level (or shortfall in funding), which are figured out comparing with available fund for the relevant sector (IRA) in the province over the Phase I requirements. Other funds such as those provided by foreign assistance and local tax portions are kept blank to supplement upon confirmation of additional funds available. Out of the investment cost of ₱345 million required for Phase I (1999-2003), IRA can fund 202.9 million or 58.8% of the requirements. Hence, there is a big shortfall of ₱142.5 million in funding. It will become ₱173.8 million in consideration of price escalation with annual rate of 7%.

Municipal achievement percentages in finance are shown in Table 11.3.3 in provision of available fund originated by IRA against Phase I financial requirements. The allotted IRA in calculation for Surigao city, Loreto, Placer and Tubod is sufficient with more than 100% achievement. The municipalities of San Francisco and Santa Monica are also expected to achieve higher level with more than 90%. The exceeding amount of the city/municipality allotted from provincial IRA may be redistributed to other municipalities. Others are in the range between about 20% and 90% to the requirements, while provincial achievement is 59% in average.

Table 11.3.1 Financing Requirement by Sector Component for the Province

Unit: 1,000 pesos

Sector Components	1999	2000	2001	2002	2003	Total 1999- 2003	Total 2004-2010
Direct Cost							
<i>1. Direct Construction Cost</i>							
<i>Urban Water Supply</i>							
Level III System	0	28,879	43,319	43,319	28,879	144,396	526,132
<i>Rural Water Supply</i>							
Level II System	11,419	11,419	0	0	0	22,838	0
Level I Facilities	0	6,344	9,516	9,516	6,344	31,722	43,448
<i>Urban Sanitation</i>						54,560	
Household toilet	0	89	134	134	89	447	156
Public school toilet	0	2,954	4,431	4,431	2,954	14,769	5,855
Public toilet	0	1,445	2,168	2,168	1,445	7,226	3,097
Disinfection of Level I Deep Well and Shallow	4	7	7	7	7	32	0
<i>Rural Sanitation</i>							
Household toilet	0	78	117	117	78	389	3,643
Public school toilet	0	3,425	5,138	5,138	3,425	17,127	8,910
Disinfection of Level I Deep Well and Shallow	11	20	20	20	20	89	78
<i>Urban Sewerage</i>	N/A	N/A	N/A	N/A	N/A	N/A	562,655
Sub-total	11,434	54,661	64,850	64,850	43,242	239,037	1,153,973
<i>2. Procurement of Vehicle/Equipment/Maintenance tools</i>							
Well drilling rig and service truck with crane	0	0	0	0	0	0	26,782
Support vehicle	0	590	0	0	0	590	0
Well rehabilitation equipment	0	280	0	0	0	280	0
Maintenance tools	0	56	84	84	56	280	0
Water quality testing kit	0	3	5	5	3	15	0
Sub-total	0	929	89	89	59	1,165	26,782
<i>3. Water Quality Laboratory</i>	2,032	0	0	0	0	2,032	0
<i>4. Sector Management Cost</i>							
<i>Engineering Studies</i>							
Feasibility study and detail design	13,502	7,925	0	0	0	21,427	52,891
Construction supervision	457	2,179	2,583	2,583	1,722	9,546	23,507
<i>Institutional Development</i>	5,220	4,787	2,567	1,717	1,283	15,574	52,891
Sub-total	19,179	14,891	5,150	4,299	3,005	46,547	129,289
Total Direct Cost	32,644	70,481	70,088	69,238	46,306	288,781	1,310,041
Contingencies							
<i>1. Physical Contingency</i>	3,264	7,048	7,009	6,924	4,631	28,876	131,004
<i>2. Price Contingency</i>	2,514	11,234	17,350	23,671	20,505	75,273	N/A
<i>3. Value-Added Tax (VAT)</i>	2,742	6,569	6,752	6,752	4,502	27,318	N/A
Total Investment Cost	41,165	95,333	101,199	106,584	75,944	420,248	1,441,048
Total Investment Cost (excluding Price Contingency)	38,651	84,099	83,849	82,914	55,439	344,952	1,441,048

Table 11.3.2 Additional Fund Requirement for the Medium-Term Plan

Unit: P 1,000

	1999	2000	2001	2002	2003	Total 1999-2003
Financing Requirement	38,651	84,099	83,849	82,914	55,439	344,952
Expected available fund						
National	33,193	36,267	40,206	44,111	49,095	202,872
Local (IRA)						
Others	33,193	36,267	40,206	44,111	49,095	202,872
Total	5,458	47,832	43,643	38,803	6,345	142,080
Shortfall in funding (Additional Fund Requirements)	5,840	54,763	53,464	50,863	8,899	173,829

Note: Shortfall in funding; above - current year price level.

below - current year price escalated at 7% per year.

Table 11.3.3 Internal Revenue Allotment for Water Supply and Sanitation Sector by Municipality
(Medium-term Development, 1999-2003)

Unit: P 1,000

Name of Municipality	IRA Allocation to Municipalities						Phase I Investment Cost Requirement (b)	Achievement Percentage (%) in Finance (a)(b)									
	Urban Water Supply			Rural Water Supply													
	Allocated from Provincial Government	Allotted Municipality Fund	Total	Allocated from Provincial Government	Allotted Municipality Fund	Total											
Alegria			3,509	1,973	472	855	378	457	834	5,198	11,272	46					
Bacuas	1,491	2,466	3,957	1,321	572	1,893	166	44	210	6,060	34,986	17					
Basilisa (Rizal)	1,491	2,717	4,208	556	678	1,234	169	243	412	673	987	14,578	47				
Burgos	1,215	1,414	2,630	146	25	170	220	359	579	1	109	3,488	97				
Cagdianao	4,604	3,475	8,079	615	352	967	170	70	240			9,286	92				
Claver	1,491	3,757	5,248	314	345	660	166	177	343	5	3	6,259	12,047	54			
Dapa	1,491	1,937	3,428	413	360	774	798	978	1,776	373	401	6,751	15,449	44			
Del Carmen				1,172	2,699	3,871	166	236	403	44	39	4,357	6,253	70			
Dinagat				1,618	2,450	4,068	148	176	324	302	425	727	5,119	10,108	51		
General Luna	1,491	1,731	3,222	577	549	1,126	257	365	622	230	254	485	5,455	12,722	43		
Gigaquit	1,491	2,899	4,390	625	561	1,186	166	104	271			749	5,846	16,987	34		
Lubjo (Albor)	4,604	2,544	7,148	488	394	883	311	285	595			747	1,496	19,373	52		
Loreto				1,128	1,523	2,651						96	96	3,618	1,593	227	
Maimit	1,416	870	2,287		1,523	1,523		754	754			691	691	5,255	10,549	50	
Mahmono	4,604	2,818	7,422	306	96	401	383	134	567	301	144	445	8,835	31,237	28		
Pilar	447	352	799	928	1,780	2,708		92	92	9	260	269	3,868	6,047	64		
Placer				2,754	2,754	5,508		886	886			54	54	3,694	2,071	178	
San Benito	1,491	1,189	2,680	708	917	1,625				25	11	36	4,341	7,228	60		
San Francisco (Aha-Aon)	16	427	443	66	1,767	1,833	18	478	496			22	2,772	2,776	100		
San Isidro				1,246	2,206	3,452	166	180	347			18	2	9,481	44,228	21	
San Jose	4,604	3,192	7,796	1,187	478	1,664						730	2,293	2,395	96		
Santa Monica (Sapao)				850	850	1,700						119	119	4,389	8,505	52	
Sison	1,491	2,398	3,889		1,335	1,335	166	215	381			679	3,538	4,708	75		
Socorro				888	888	1,776		635	635			13,727	58,215	15,668	372		
Sunyo City (Capital)				16,420	16,420	32,840		28,068	28,068			301	840	3,888	4,432	87	
Tagana-An	194	407	601	294	537	830	311	1,006	1,316			29	119	148	7,360	8,222	90
Tubajon	4,405	1,987	6,393	257	200	457	166	196	363			909	1,842	2,751	2,309	119	
Tubod								909	909			22,433	202,909	344,930	59		
Total	38,035	39,864	77,900	13,657	41,820	56,192	5,618	38,953	43,284	4,364	22,433	25,534	202,909	344,930	59		

11.4 Medium-Term Implementation Arrangements

Financial requirements to meet Phase I target coverage are substantial. However, projected funding available (IRA) in application of past trend revealed that considerable amount of additional fund must be arranged. Under this situation, reference scenarios are discussed with the assumption of different levels of funding availability with reference to service coverage. Alternative countermeasures are also discussed in view of (1) acquisition of external funds, (2) augmentation of sector finance under current arrangements (IRA and others), (3) introduction of private sector participation to mitigate public investment needs, and (4) effective and economical investments.

11.4.1 Reference Scenarios in Different Funding Levels

Achievement levels of service coverage in the target year are examined in assumption of five funding levels. It is regarded that the service coverage is increased in proportion to the investment during Phase I period. The relationships between funding levels and corresponding percentages of service coverage are illustrated in Figure 11.4.1 and Figure 11.4.2 for water supply and sanitation sectors, respectively. The service coverage for the water supply sector in the year 2000 would not sustain even the present levels in the provision of only projected IRA

Three reference scenarios are discussed on different levels of funding. These scenarios will be referred to in combination of alternative countermeasures discussed in Section 11.4.2. Using computer-based programs, these scenarios may be modified by policy makers according to the updated information and policy on available fund and sector targets.

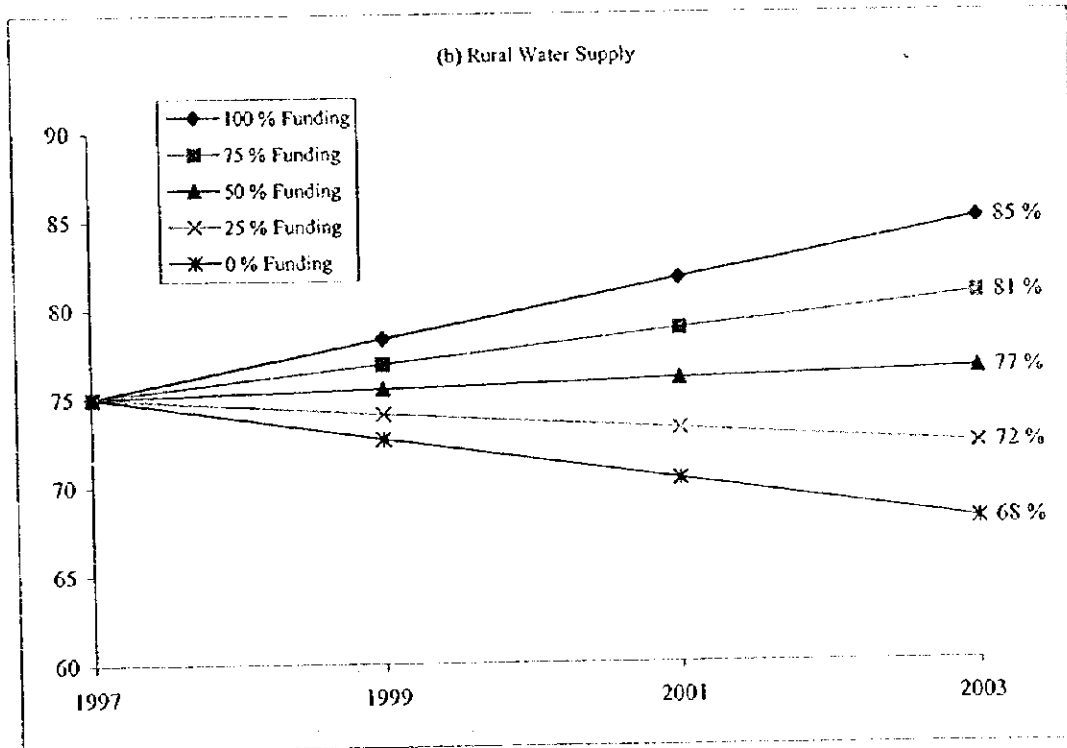
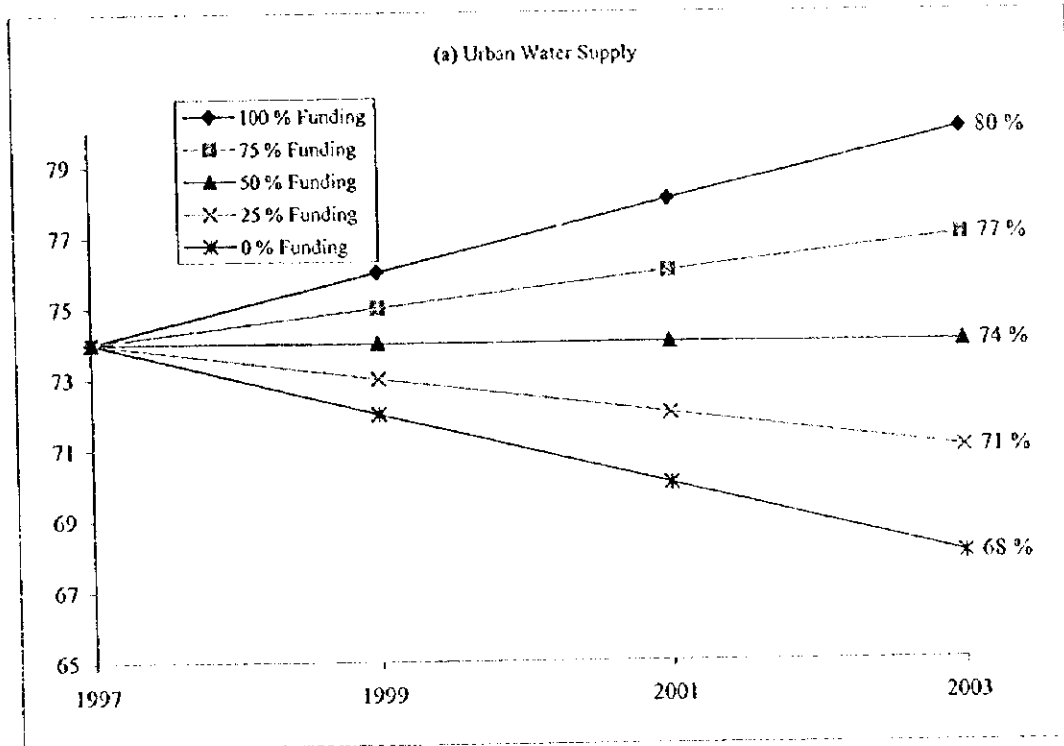
(1) The First Reference Scenario

No funding constraints are considered in this scenario to realize Phase I development as planned. This scenario is too optimistic based on the past experiences.

(2) The Second Reference Scenario

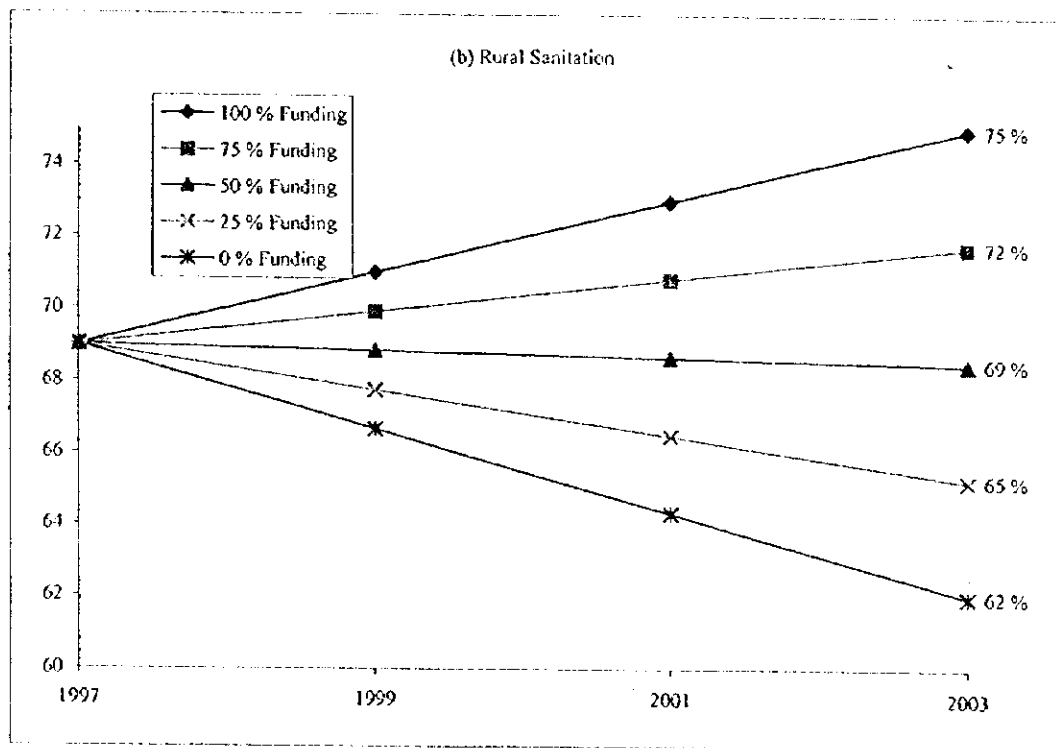
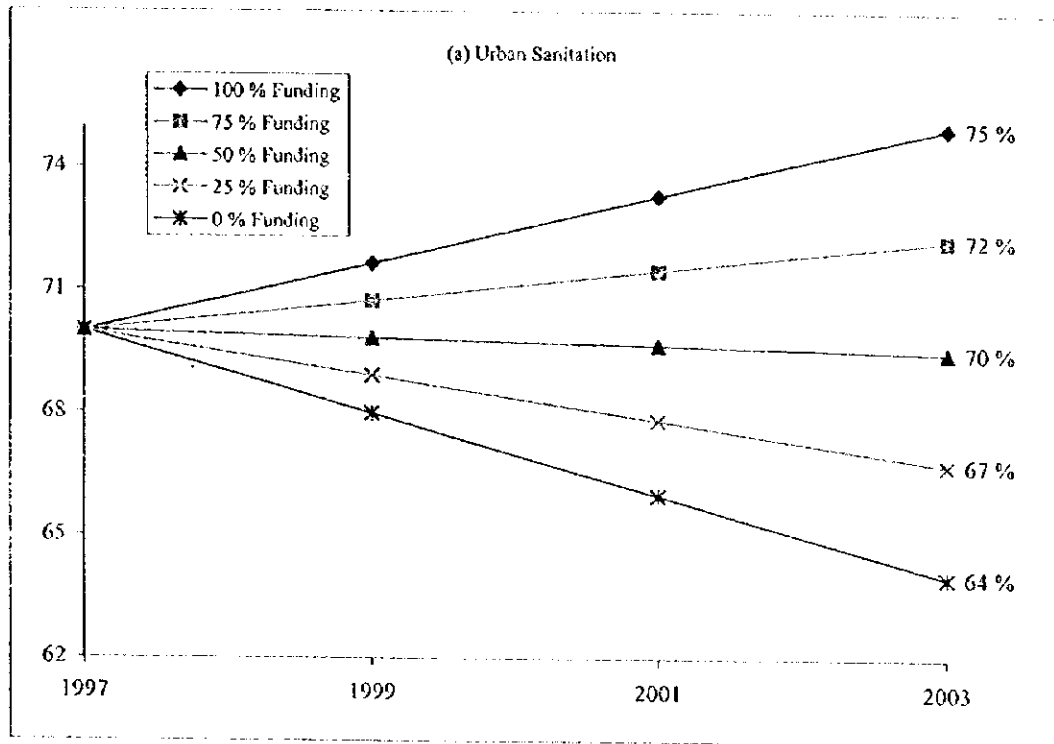
An intermediate scenario with 50 - 75 %-funding ranges are considered. Urban and rural water supply coverage in the year 2003 is attained between 74-77% and between 77-81 %, respectively. For urban and rural sanitation (household toilets), coverage will reach to 70-72% and 69-72% respectively on the assumption that required private investments are followed.

Table 11.4.1 Relation Between Funding Levels and Percent of Coverage for Water Supply Sector



Note: Percentages of the coverage between 1997 and 2003 are simply prorated as the reference

Table 11.4.2 Relation Between Funding Levels and Percent of Coverage for Sanitation Sector



Note: Percentages of the coverage between 1997 and 2003 are simply prorated as the reference

(3) The Third Reference Scenario

A 25% funding against the total requirements of Phase I is assumed as a possible achievement level with the augmentation of IRA. Urban and rural water supply coverage in the year 2003 will be attained at 71% and 72%, respectively, while urban and rural sanitation coverage will be at 67% and 65%.

11.4.2 Alternative Countermeasures

This sub-section presents the means of financing the shortfall for the investment program.

(1) Acquisition of external funds

Foreign assistance has played a significant role in the development of the relevant sectors in the past. Negotiations with the central government agencies (DILG, LWUA, etc.) are requisites to access the foreign funds. Development of new local financial mechanism is also needed for LGUs under current policy shifts to increase the opportunities of LGUs undertaking foreign-assisted projects.

As a matter of fact, Local Government Empowerment Fund (LGEF) was established in 1996 to provide a mechanism for channeling external grants and loans to 19 priority provinces under the Social Reform Agenda and/or those classified as 5th or 6th class LGUs (details are referred to Chapter 11.4.2, Supporting Report).

The foreign loan may be availed of at the maximum financing limit of 75% of the overall project cost. This can be secured by GOP and channeled through the MDF.

(2) Augmentation of sector finance under current arrangements

Increase of the IRA to the Relevant Sector

The increase of IRA from the national government to LGUs is at first needed along with current procedure. LGUs shall also arrange the funds with a priority to the relevant sector.

Local Taxes

More allocation of local taxes to the relevant sector shall be arranged although the share of local taxes in the provincial total budget is small.

Utilization of Other Local Funds

Utilization of other funds, Countryside Development Fund (CDF) in particular, shall be sought for development of the relevant sector.

(3) Introduction of private sector

Privatization of Level III Waterworks System

Privatization of Level III systems helps expedite sector development and sustainability of the system as suggested by NEDA Board Resolution No. 4 (series 1994).

LGU Guaranty Organization

LGU Guaranty Organization as a public-private corporation managed by private sector in the national level shall be studied to encourage private financing for the development of environmental infrastructure, which is introduced in other developing countries. The organization will guarantee local private loans to LGUs in provision of a longer term financing.

(4) Effective and economical investment

Investment Need Ranking of Municipalities

Investment need ranking of the municipalities is discussed as a guide for implementation of PW4SP and a measure for effective and economical public investment. Referring to this ranking, the provincial government will arrange its financial resources more effectively.

The ranking for urban water supply is specifically studied considering three factors, while a sole factor of additional requirements is assumed to coincide with the priority of other sub-sectors. Synthetic evaluation of concerned sub-sectors is finally presented in the context of comprehensive improvement of this sector. The result for urban water supply is employed for allocation of provincial IRA to the municipalities in the concerned sub-sector. The synthetic ranking may be availed for the huge investment in use of the funds to be provided by other donors in the future.

For the urban water supply component, the ranking criteria comprise three essential evaluation factors, namely: (a) percentage of underserved and unserved population in the base year; (b) percentage of underserved and unserved population in Phase I; and (c) percentage of population unserved by Level III Systems in the base year. First, these factors are scored by the range of underserved and unserved percentage and totaled by municipi-

pality in application of weighing method. Adopted weight to the factors (a), (b) and (c) are 50%, 35% and 15%, respectively. Table 11.4.1 shows ranking procedures, overall weighted score and investment need ranking of the municipalities. There are five municipalities identified as first priority municipalities, namely Cardiano, Libjo, Malimono, San Jose and Tubajon.

With reference to provincial fund allocation, it is assumed that 60% of the fund for urban water supply from provincial government is distributed equally to the top five ranking municipalities, while the remaining 40% are equally distributed to the rest of the municipalities. The result of distribution is shown in Table 11.4.2. Six municipalities and Surigao city are out of this study, because of either sufficient fund allocation to achieve the target or no existence of urban area. Among subject municipalities, the available fund for the two municipalities of Loreto and San Francisco is larger than the Phase I requirements for urban water supply. The surplus portion over 100% is redistributed equally to the municipalities with the ranking below 6th.

To come up with the synthetic ranking of the municipalities, scoring method is also employed for other sub-sectors. The score is derived from the range of underserved and unserved percentage in the base year. Synthetic investment need ranking of municipalities covering four sub-sectors is shown in Table 11.4.3 (refer to ranking procedures in Table 11.4.1, Supporting Report). The top ranking municipality is San Jose, which indicate that it has the priority for investments especially in water supply sub-sectors. Tubod, which is the 28th ranking municipality is the least priority in terms of investment.

11.5 National Government Assisted Level I Water Supply and Sanitation Project

Of the overall project requirements for the medium-term development, those for Level I water supply and sanitation improvement with possible assistance from the GOP were studied in application of new cost-sharing arrangement. In 1997, the six provinces in the Luzon area (after completion of PW4SP) jointly submitted the project proposal, as a package of OECF assisted loan, to the NEDA through the DILG for the limited sub-sectors under the above conditions.

Table 11.4.1 Municipal Investment Need Ranking for Urban Water Supply

Name of Municipality	Evaluation Factor			Scoring by the Factor				Overall Weighted Score	Investment Need Ranking
	% of Underserved and Underserved Population in Base Year	% of Underserved and Underserved Population in Phase I	% of Population Underserved by Level III Systems in Base Year	Underserved and Underserved Population in Base Year	Underserved and Underserved Population in Phase I	Population Underserved by Level III Systems in Base Year			
Alagna	9	18	80	0.20	0.40	1.00	0.39	22	
Bacuz	66	70	66	1.00	1.00	0.80	0.97	6	
Basilisa (Rizal)	47	56	100	1.00	0.30	1.00	0.93	7	
Burgos	32	38	85	0.80	0.60	1.00	0.76	11	
Cagdianao	100	100	100	1.00	1.00	1.00	1.00	1	
Claver	33	39	100	0.80	0.60	1.00	0.76	11	
Dapa	29	31	88	0.60	0.60	1.00	0.66	14	
Del Carmen	3	12	98	0.20	0.20	1.00	0.32	24	
Dinagal	4	4	100	0.20	0.20	1.00	0.32	24	
General Luna	36	43	100	0.80	0.60	1.00	0.76	11	
Gizaquit	45	51	63	1.00	0.80	0.80	0.90	10	
Libjo (Albor)	73	76	100	1.00	1.00	1.00	1.00	1	
Loreto	11	23	91	0.40	0.40	1.00	0.49	16	
Mainit	18	24	83	0.40	0.40	1.00	0.49	16	
Malbomo	87	87	89	1.00	1.00	1.00	1.00	1	
Pilar	18	25	100	0.40	0.40	1.00	0.49	16	
Placer	5	17	100	0.20	0.40	1.00	0.39	22	
San Benito	44	49	81	1.00	0.80	1.00	0.93	7	
San Francisco (Anao-Aon)	14	22	60	0.40	0.40	1.00	0.49	16	
San Isidro	4	15	100	0.20	1.00	1.00	0.60	15	
San Jose	70	71	98	1.00	1.00	1.00	1.00	1	
Santa Monica (Sapao)	7	7	20	0.20	0.20	0.20	0.20	27	
Sison	55	59	97	1.00	0.80	1.00	0.93	7	
Socorro	12	22	100	0.40	0.40	1.00	0.49	16	
Surigao City (Capital)	4	13	36	0.20	0.20	0.40	0.23	26	
Tagana-An	14	22	100	0.40	0.40	1.00	0.49	16	
Tubaron	63	67	100	1.00	1.00	1.00	1.00	1	
Tubod	3	3	100	0.20	0.20	0.20	0.20	27	
Provincial Total	26	32	72						

2. Weight Allocation to Score.

Note: 1. Scoring to Underserved and Underserved Percentage.

Score	Range of Underserved and Underserved Percentage				Allocated Weight
	41 < %	61 < %	81 < %	15	
1.0	41 < %	61 < %	81 < %	15	
0.8	31 < % < 40	46 < % < 60	61 < % < 80		
0.6	21 < % < 30	31 < % < 45	41 < % < 60		
0.4	11 < % < 20	16 < % < 30	21 < % < 40		
0.2	% < 10	% < 15	% < 20		

Table 11.4.2 Distribution of Provincial IRA to Municipalities for Urban Water Supply

Unit: 1,000 peso

Ranking	Name of Municipalities	Fund Distribution		IRA to Municipalities from National Government (2)	Available Fund Distributed to Municipalities (1) + (2)	Phase I Requirements	Accomplishment Percentage (%)
		Fund Distribution from Provincial Government (1)	Distribution Percentage (%)				
22	Alegria						
6	Bacuag	1,491	4.12	2,466	3,957	28,000	14
7	Basilisa (Rizal)	1,491	4.12	2,717	4,208	9,187	46
11	Burgos	1,215	3.36	1,414	2,630	2,670	98
1	Cagdianao	4,604	12.74	3,475	8,079	25,845	31
11	Claver	1,491	4.12	3,757	5,248	10,571	50
14	Dapa	1,491	4.12	1,937	3,428	8,139	42
24	Del Carmen						
24	Dinagat						
11	General Luna	1,491	4.12	1,731	3,222	7,595	42
10	Gigaquit	1,491	4.12	2,899	4,390	13,817	32
1	Libjo (Albor)	4,604	12.74	2,544	7,148	12,416	58
16	Loreto			2,393	2,393	1,054	227
16	Mainit	1,416	3.92	870	2,287	2,392	96
1	Malimono	4,604	12.74	2,818	7,422	27,153	27
16	Pilar	447	1.24	352	799	858	93
22	Placer						
7	San Benito	1,491	4.12	1,189	2,680	4,061	66
16	San Francisco (Anao-Aon)	16	0.04	427	443	444	100
15	San Isidro						
1	San Jose	4,604	12.74	3,192	7,796	38,454	20
27	Santa Monica (Sapao)						
7	Sison	1,491	4.12	2,393	3,889	7,465	52
16	Socorro			888	888	1,182	75
26	Surigao City (Capital)						
16	Tagana-An	194	0.54	407	601	650	92
1	Tubajon	4,405	12.19	1,987	6,393	6,530	98
27	Tubod						
	Total	36,143	105	39,864	77,900	208,483	37

In the same context as proposed by the six provinces, project components with scope of work and financial viability were studied. The project is a part of medium-term development plan for Level I water supply and sanitation for limited classes of the municipality. The DILG is assumed to be Executing Agency and the province Implementing Agency in the meantime. The project may be merged together with those of the 1st batch provinces for preparation of the PW4SP. The implementation of a packaged project may be realized in the near future.

Table 11.4.3 Municipal Investment Need Ranking

Name of Municipality	Weighted Score by Sub-sector				Total Weighted Score	Synthetic Municipal Investment Need Ranking
	Urban Water Supply	Rural Water Supply	Urban Sanitation	Rural Sanitation		
Alegria	0.10	0.05	0.15	0.10	0.40	21
Bacuag	0.24	0.15	0.10	0.05	0.54	11
Basilisa (Rizal)	0.23	0.05	0.25	0.10	0.63	5
Borgos	0.19	0.05	0.10	0.10	0.44	16
Cagdianao	0.25	0.20	0.25	0.05	0.75	3
Claver	0.19	0.05	0.25	0.10	0.59	7
Dapa	0.17	0.15	0.15	0.10	0.57	8
Del Carmen	0.08	0.10	0.05	0.20	0.43	18
Dinagat	0.08	0.05	0.20	0.10	0.43	17
General Luna	0.19	0.05	0.20	0.10	0.54	11
Gigaquit	0.23	0.05	0.15	0.05	0.48	14
Libjo (Albor)	0.25	0.10	0.05	0.15	0.55	10
Loreto	0.12	0.05	0.10	0.25	0.52	13
Mainit	0.12	0.05	0.15	0.05	0.37	25
Malimono	0.25	0.05	0.25	0.05	0.60	6
Pilar	0.12	0.15	0.1	0.1	0.47	15
Placer	0.1	0.05	0.1	0.1	0.35	26
San Benito	0.23	0.25	0.05	0.25	0.78	2
San Francisco (Arao-Aon)	0.12	0.05	0.2	0.05	0.42	19
San Isidro	0.15	0.05	0.05	0.15	0.4	21
San Jose	0.25	0.25	0.2	0.1	0.8	1
Santa Monica (Sapao)	0.05	0.25	0.25	0.15	0.7	4
Sison	0.23	0.05	0.05	0.05	0.38	23
Socorro	0.12	0.1	0.05	0.1	0.37	24
Surigao City (Capital)	0.06	0.05	0.25	0.05	0.41	20
Tagana-An	0.12	0.05	0.1	0.05	0.32	27
Tubajon	0.25	0.05	0.05	0.2	0.55	9
Tubod	0.05	0.05	0.05	0.05	0.2	28

11.5.1 Project Components

(1) Water Supply and Sanitation Component

The water supply component provides Level I water supply system in the rural area (limited to 5th and 6th municipalities) consisting of 59 deep wells, 229 shallow wells and 40 spring development.

The sanitation component provides 2,808 units of toilet bowl by distributing toilet molds (pour flush type only), 11 public toilets and 66 school toilets to the rural communities. With the integration of sanitation in the water supply projects, equal emphasis shall be given to sanitation component to ensure a greater health impact in the rural communities.

School toilet will be constructed for public school in the rural areas, while public toilets will be constructed at public markets and bus terminals in urban areas. Health consciousness among the rural people will also be bolstered with the provision of health education training and IEC materials.

(2) Equipment/Commodity Assistance

Due to budgetary constraint and cost-sharing arrangement required (heavy burden to the LGUs), the provision of drilling machine and its service truck is excluded in the medium-term plan (to be considered for long-term plan). While each one unit of service vehicle and well rehabilitation equipment is considered. In addition, maintenance tool and water quality testing kits are to be procured and one unit will be provided to each municipality to maintain the facilities.

(3) Consultancy Services

Considering the magnitude and complexity of the project, consulting services and technical assistance may be availed to strengthen the executing and implementing agencies' capabilities in undertaking the project. The services will cover technical and institutional/community development aspects of the project.

During the detailed design stage, the services will cover hydrogeological survey, finalization of well/spring construction sites based on site selection criteria to be developed, and preparation of bidding documents. Guidelines and training program for strengthening the capability of implementing agencies and NGOs will be prepared and carried out. The construction stage will include assistance to LGUs in the supervision of construction works, community organizing and training works.

(4) Institutional Development

The project entails community development with people's active participation to assure the responsibility for O&M of the facilities and strengthening of existing institution/organization and/or formation of new ones. Thus, various activities will be undertaken from national to beneficiary levels. A sufficient cost for the purpose will be taken into account.

11.5.2 Project Requirements

The province will manifest its willingness to participate in the project entailing timely arrangements to meet NEDA requirements. These requirements are (1) RDC Endorsement, (2) ECC clearance and (3) Letter of Commitment. Water right permit from the National Water Resources Board will be fulfilled after site selection and preparatory works have been undertaken. In addition, Memorandum of Agreement (MOA) on the cost-sharing and other arrangements required for the project will be exchanged between the province and concerned municipalities.

11.5.3 Funding Requirements

(1) New Cost-Sharing Policy

The project finance was studied in accordance with the 50%-50% cost sharing arrangement (50% is an average municipality's share among concerned municipalities) between the GOP and the LGUs. Financial sharing among the province, municipality and barangay shall then be clarified based on the estimated cost requirements through MOA.

The new policy of the national government grants for devolved activities stated that "this scheme shall be applied to all new ODA-assisted projects that are currently being packaged in support of LGUs". With regard to this, 50% national government share will be applied for Level I water supply and even 70% of NG share for 5th and 6th classes of municipalities for sanitation component (refer to Table 11.5.1).

Table 11.5.1 New Cost Sharing Arrangement between NG and LGUs

Sector/Activity	LGU Income	Devised NG	Remarks
Water Supply: Level I only	1 st to 4 th	0	No GOP grants for Level II & III water
	5 th to 6 th	50	
Sanitary Support Faci. for Public Markets and Slaughterhouses	1 st to 2 nd	0	
	3 rd and 4 th	50	
	5 th and 6 th	70	

(2) Financial Viability

1) Conditions and Assumptions for Financial Study

- The cost sharing between the GOP and LGUs is 50% : 50% of the overall project cost. While, it is assumed that the 50% share of LGU is further allocated to the LGUs and beneficiaries with 47% and 3% to the overall cost, respectively.
- The financial sources of the national government are the loan from foreign donor and GOP counterpart budget and LGUs from the budget of the province and municipalities. The part of beneficiaries is equity contribution including land purchase cost, right of way, labor, etc.
- The O&M cost is managed by the beneficiaries.

2) Project Cost

The cost estimate was made based on 1997 price level in Chapter 10. Then, physical and price contingencies as well as value-added tax were added. The project cost for the concerned municipalities in line with above conditions/assumptions is shown in Table 11.5.2. Overall aggregate cost from 1999 to 2003 arrived at about ₱107.3 million (₱75.9 million in 1997 price level) referring to the implementation schedule of the project.

3) Financial Arrangement

The two alternatives for the financial arrangements are studied to prepare required cost to be shared among concerned parties: i) Utilization of IRA only and ii) Utilization of IRA and MDF.

Case 1: Utilization of IRA fund only

Currently, there is no projection on drastic increase of LGUs' budget through the future. Under such a condition, the following are considered.

- Potential fund is the IRA allotted annually from the GOP to municipalities and from province to municipalities. Municipal tax is negligible small in allocation to the sector. The total municipal budget available was projected by sub-sector in Section 11.3.
- Arrangements by the municipalities with MDF and banks are disregarded considering current financial capability of the municipalities.
- 5-year development program (from 1999 to 2003) is applied to increase project fund using available IRA

Table 11.5.2 GOP-Assisted Level I Water Supply and Sanitation Project Cost

(Unit: Pesos)

Category	Qty.	Unit Cost	Amount	GOP		LGU
				Foreign Loan	GOP/CP	
A. Const. & Civil Works						
Water Supply						
1. Deep Well (30m)	47	132,800	6,241,600			
2. Deep Well (50m)	4	188,300	753,200			
3. Deep Well (70m)	8	248,200	1,985,600			
4. Shallow Well	229	32,100	7,350,900			
5. Spring Development	40	294,100	11,764,000			
Sub-total a			28,095,300	9,890,206		18,205,094
Sanitation						
1. HH Latrines	2,808	150	421,200			
2. School Toilets	66	274,100	18,090,600			
3. Public Toilets	11	344,100	3,785,100			
Sub-total b			22,296,900	7,849,033		14,447,867
Land acquisition						
Land acquisition & Right of Way			1,840,000			1,840,000
Sub-total A			52,232,200	17,739,239		34,492,961
B. Equip./Logistic Support						
1. Support Vehicle	1	590,000	590,000	590,000		
2. Well Rehab. Eq.	1	280,000	280,000	280,000		
3. Maintenance Tools	19	10,000	190,000	190,000		
4. Water Quality Test Kits	19	15,300	290,700	290,700		
Sub-total B			1,350,700	1,350,700		
C. Consultancy Services						
1. Hydrogeological Survey			1,148,000	1,148,000		
2. D/D and Const. Sv.			5,745,542	5,745,542		
Sub-total C			6,893,542	6,893,542		
D. Institutional Devt.						
1. Capacity Enhanc. Prog.	L.S.		3,200,000	2,650,000	550,000	
2. Commu. Manag. Prog.	284	10,770	3,058,680	1,027,716	2,030,964	
3. Health & Hygiene Educ.	284	1,800	511,200		511,200	
4. Water Quality Surveil.	284	700	198,800		198,800	
5. NGO Assistance	284	1,200	340,800		340,800	
6. Administrative Support	L.S.		1,200,000		1,200,000	
Sub-total D			8,509,480	3,677,716	4,831,764	
E. Physical Contingency						
			6,898,592	2,966,120	483,176	3,449,296
Total (A+B+C+D+E)			75,884,514	32,627,317	5,314,940	37,942,257
GOP Total					37,942,257	
LGUs						35,665,722
Equity						2,276,535
LGUs + Equity						37,942,257
F. Others						
1. Price Contingency			28,802,529	12,972,293	1,945,035	13,885,201
2. Value Added Tax (VAT)			2,598,348		2,598,348	
Sub-total F			31,400,877	12,972,293	4,543,383	13,885,201
Grand Total			107,285,391	45,599,610	9,858,323	51,827,458

Note: (1) Equity of users includes land cost, right of way, labor, etc., equivalent to 3% of direct cost (excluding item F).

(2) N.A.: Not applicable

(3) Assumption/Conditions for Cost estimate

1) Direct cost: based on 1997 price level.

2) Physical contingency: 10% of materials procured.

3) Price contingency: Forex 3%; local 7%; compounded annually, base year 1997

4) Value added tax; 10% materials produced.

Applying the cost-sharing arrangement, the projected IRA available was estimated for the eligible municipalities in provision of national government grant fund based on the following conditions.

- a) The available fund of sub-sectors is a sum of municipal and provincial allotments of IRA
- b) For water supply sub-sector, IRA to municipalities with income classification of 5th and 6th classes is counted. The IRA allotted to the province is divided into two groups; class 1st to 4th and class 5th & 6th in proportion to the construction cost required. The provincial IRA for the eligible municipalities is considered for this project.
- c) For sanitation sub-sector, IRA to the eligible municipalities is regarded as available fund. The manner of allocation of provincial IRA to the eligible municipalities is same as that in water supply sub-sector.

The total IRA of the province available for the eligible municipalities in the subject sector was estimated at P42,317,000, as a total of 5-year development program, consisting of water supply, P24,131,000 and sanitation, P18,186,000 (details are included in Table 11.5.1, 11.5.2 and 11.5.3, Supporting Report). The available IRA by sub-sector is shown below.

<u>Sub-sector</u>	<u>Provincial IRA</u>	<u>Municipal IRA</u>	<u>Total</u>
Rural Water Supply:	7,927,000	16,204,000	24,131,000
Rural Sanitation:	2,986,000	8,490,000	11,476,000
Urban Sanitation:	1,944,000	4,766,000	6,710,000
Total:	12,857,000	29,460,000	42,317,000

The cost comparison was made between the estimated project cost to be shared by the LGUs and available IRA of LGUs. Both required cost and the IRA are based on 1997 year price level without considering price escalation, but including physical contingency.

The comparison shows that the projected available IRA, as the provincial total aggregated in assumption of respective 5 years development programs, almost meets the cost to be shared by the LGUs. Table 11.5.3 shows the cost sharing for the project among the GOP, LGUs and beneficiaries (BWSAs). The GOP shall shoulder 50% of the overall project cost, utilizing the foreign assisted loan of 43.0% or 32.6 million pesos and 7.0% or 5.3 million pesos of the government counterpart fund. The remaining

Table 11.5.3 Cost-Sharing for the Project (Case 1): 1997 price level

Financial Source	x 1,000 Peso	Percentage		Remarks
GOP	5,315	7.0	50	GOP counterpart
	32,627	43.0		Foreign Loan
LGUs	35,666	47	50	IRA
	2,277	3		BWSA equity
Total	75,885	100		

50% of the overall cost shall be shared between the LGUs by 47% or 35.7 million pesos and BWSAs (beneficiaries) by 3% or 2.3 million pesos.

Under this case, the IRA to be used by the LGU is 84% of available IRA (P42.3 million) to achieve the proposed project.

Case 2 Utilization of IRA and MDF

The utilization of the MDF is considered in case that the LGUs will fail to furnish IRA for the project (even if estimated IRA available meets the required cost). The foreign loan may be availed of at the maximum financing limit of 75% of the overall project cost.

Thus, the GOP shall possibly support the LGUs through the MDF in case that IRA will not be able to fill up the cost requirement of the project. Table 11.5.4 shows cost-sharing scheme for the project between the GOP and the LGUs.

Table 11.5.4 Cost-Sharing for the Project (Case 2)

Financial Source	x 1,000 Pesos	Percentage		Remarks	
GOP	5,315	7.0	5	50	GOP counterpart
	32,627	43.0	75		Foreign Loan
	(24,283)	(32.0)			Foreign Loan for MDF
LGUs	11,383	15.0	47	50	IRA
	24,283	32.0			MDF through Foreign Loan
	2,277	3.0			BWSA Equity
Total	75,885	100			

Under this case, the IRA to be used by the LGU is 27% of available IRA estimated in the previous study (P42.3 million).

GOP is possibly to finance up to P56.9 million or 75% of the total project cost in the portion of loan. Out of GOP finance through the loan, P32.6 million or 43.0% of the total project cost shall be granted to the LGUs, aside from 7.0% GOP counterpart fund.

The remaining P24.3 million or 32.0% of the total project cost shall be utilized for financing the LGUs to secure their budgetary capacity through MDF.

4) Project Implementation Schedule

The proposed implementation of the project is scheduled for five years after hiring the consultants. Figure 11.5.1 presents the proposed schedule.

Figure 11.5.1 Proposed Project Implementation Schedule

Activities	1999				2000				2001				2002				2003			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Project Implementation																				
1. Detailed Design																				
2. Community Development/ BWSA Formation																				
3. PQ, Bidding and Contractor Selection																				
4. Procurement and Delivery of Materials and Equipment																				
5. Construction of Water Supply and Sanitation Facilities (Construction supervisory services)																				
Project Monitoring																				

11.6 Cost Recovery

Cost recovery and cost sharing are essential to attain the planned targets. The PW4SP advocates the imposition of tariffs for the recovery of capital and operating cost based on the principle that adequate water, sewerage and sanitation facilities should be paid for.

(1) Level I water supply systems

For Level I systems, cost sharing between the LGUs and beneficiaries is required for the capital costs, even the portion of the beneficiaries is limited according to the current national policy. Currently, the percentage shared by the beneficiaries seems to be 3 to 5% of total requirements based on the experience.

Beneficiaries are also responsible for all recurrent costs. Monthly recurrent cost is estimated at 8 Pesos per household in the base year price level (refer to 11.6 recurrent cost in Chapter 10). The figure will be increased up to about 12 Pesos per household in the year 2003, assuming an annual inflation rate of 7%. This monthly fee seems to be affordable to the users considering the current income level, but willingness to pay shall be promoted.

Depending on the users' income level, water charges shall be determined and agreed upon among the water users. The estimated water charge of P8 /household/month for O&M is affordable, which is less than 1% of the average monthly household income. However, users will have to pay for water charge of up to 2 % to their average monthly income (P 3,963) or P79.3 /household/month to cover the cost for not only repair of hand-pump, but also rehabilitation and reconstruction of well assuming the well life of 20 years. Required O&M cost, Investment Program and FIRR are included in 11.6, Supporting Report.

(2) Level II water supply systems

Full cost recovery is required for all capital costs for Level II systems. The number of households to be covered is 3,539 to meet the target (refer to Table 8.5.1; population to be served of 18,720 and household size of 5.3 persons). The average capital cost required is estimated at P6,100 per household (refer to Chapter 10). Applying the capital recovery factor to the capital cost in loan application, 7% interest rate and 25 years repayment period, the monthly payment will be P44/household.

The annual recurrent cost per household is estimated to be P180/household/year or P15 /household/month in the base year (refer to Chapter 10). It will reach to P22.5 in the year 2003 with annual inflation rate of 7%. The combined amount of capital repayment and recurrent cost in the year 2003 arrives at about P67 which is less than 2% of the median family income as shown below.

(a) Estimated water rate (flat rate; Pesos)	:	67
(b) Percentage of (a) to monthly median household income in 2003 1)	:	1.1%
(c) Percentage of (a) to monthly low household income in 2003 2)	:	1.5%

Notes:

- 1) Provincial average monthly median income in 2003 (P5,947 per household) is derived from 1994 Family Income and Expenditure Survey considering annual inflation rate of 7%. The monthly median income in 1997 is P3,963.
- 2) Provincial average monthly low income in 2003 (P4,359 per household) is estimated using the NSO data. The monthly low income in 1997 is P2,905.

(3) Level III water supply systems

A full recovery of capital and O&M cost is required for Level III systems. To test the affordability, a comparative study was made between estimated water rate (based on standard monthly consumption; 15m³ per household) and projected income in 2003. The total capital cost of Level III water supply system is about ₱155.9 million for 7,276 households to be served. In application of inflation rate of 7% and 25 years repayment period, the annual payment arrives at ₱1,839/household. The monthly capital cost to be paid by each household is about ₱154.

The monthly recurrent cost per household is estimated to be ₱64 (₱773/year; refer to recurrent cost in Chapter 10). Using an annual inflation rate of 7%, this recurrent cost is projected to be about ₱96 /household/month in 2003.

Thus, the combined amount of capital repayment and recurrent cost is estimated at about ₱250/household/month in the year 2003. The cost shall be recovered as a monthly water rate to be paid by users. The percentage of the water rate against income with more or less 5% is commonly affordable. In this regard, monthly water consumption affordable for the low income households is less than 10 m³.

(a) Estimated water rate for 15 m ³ (Pesos)	:	250
(b) Estimated minimum water rate (1-10 m ³) (Pesos 1)	:	218
(c) Percentage of (a) to monthly median household income in 2003	:	4.2%
(d) Percentage of (a) to monthly low household income in 2003	:	5.7%
(e) Percentage of (b) to monthly low household income in 2003	:	5.0%

Notes:

1) Water rate for the HH with monthly consumption rate of 10m³ is estimated under the same assumption of (a).

Monthly median household income is ₱5,947/month and the low household income is ₱4,359/month in the year 2003.

(4) Sanitation

The provision of sanitary toilet facilities for public markets and schools is under LGUs in coordination with parent-teacher association. However, recurrent cost for the public markets shall be collected from the users including stakeholders of the market.

Household toilets shall be managed by individual households. However, the facility is costly with reference to the current income level, especially in the rural area (flush-type toilet; ₱21,300 and pour-flush toilet; ₱13,000). Governmental support is also limited to the provision of toilet bowl for pour-flush toilets as an incentive to increase the distribution of water-sealed toilets. Thus, cost recovery in application of loan may be necessary.

Applying the capital recovery factor to the construction cost with assumptions of 7% interest rate and 5 years repayment period, monthly repayment amounts to about ₱ 468 for a flush type and ₱286 for a pour-flush type, respectively (details of unit cost are referred to in Chapter 10, Supporting Report). The percentages of repayment to household income in the year 2003 are calculated in the same manner as the study for Level III water systems and are shown below.

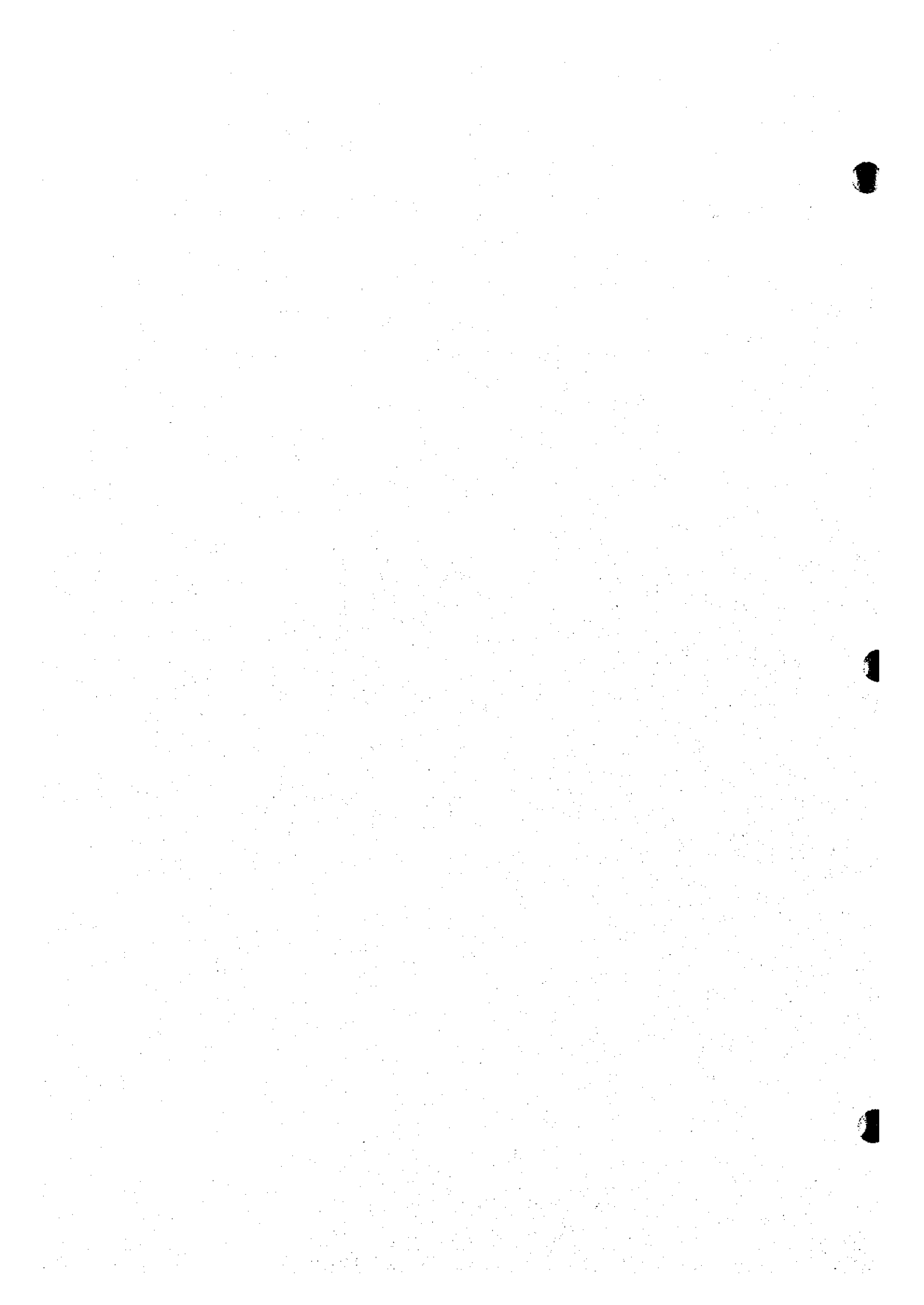
(a) Repayment for Flush Type (Pesos)	:	468
(b) Repayment for Pour Flush Type (Pesos)	:	286
(c) Percentage of (a) to monthly median household income in 2003 ¹⁾	:	7.9%
(d) Percentage of (b) to monthly low household income in 2003 ¹⁾	:	6.6%

To expedite the sanitation sector improvement, introduction of specific loans that are revolving in character with low interest rates and longer repayment period may be an effective solution. For urban sanitation, the linkage with existing housing loan shall be established to cover construction of sanitary toilets.

Chapter

**MONITORING FOR
MEDIUM-TERM DEVELOPMENT PLAN**

12



12. MONITORING FOR MEDIUM-TERM DEVELOPMENT PLAN

12.1 General

Many of the systems constructed earlier have operated in a limited way because of the insufficient monitoring and post-construction technical support, aside from the problems in promotion of self-reliance and local community management. This Chapter seeks to recommend a focused, practical, viable, creative approach to strengthening sector and project monitoring. The development of a coordinated monitoring system is one of the key components of an effective management system.

Sector monitoring refers to the overall water and sanitation situation in the province. One may readily use a demand-supply model for sector monitoring. Demand would be indicated by such indicators as coverage, health conditions, etc. Supply would be indicated by the water resources situation, by the available funding, or by water/sanitation associations organized to undertake sector activities. Project monitoring, on the other hand, looks at the progress of specific activities or projects. Indicators would thus include; disbursements, percent completion, cost overruns (underruns), etc.

12.2 Sector Monitoring

- (1) The monitoring system must support a well-defined and accepted sector development process-model. There are four general aspects of sector monitoring which will be addressed:
 - 1) Information collection: Defining the information needs of the LGUs from various levels; reviewing current, readily-available sector information, including its reliability and timeliness; identifying the information gaps and deficiencies of the information system; data consolidation and processing.
 - 2) Tracing the flow of raw data from the field (or other related monitoring systems) to the central level. Identifying possible causes of distortions, inconsistencies or blocks.
 - 3) Information analysis: Assessing the quality of information; reviewing the analyses done.
 - 4) Data feedback: Reviewing the impact of information on planning and decision making at the policy level, the resource allocation level and the operating level; tracing the flow of data back to the field.

(2) Sector performance deficiencies demand that serious thought be given to innovations to reduce costs in achieving the provincial sector plan. With the monitoring system, the sector should be able to take a fresh and objective view of the way to meet current strategies. For example, does community management of systems really work? Do low-cost technologies make sense? Under what conditions and how? How can the target be achieved for low-income communities? A sector monitoring system should be flexible to support planning and research studies on such specific policy and operational issues.

(3) In putting together a relevant sector monitoring system, the following should be seriously looked into:

- 1) It should reinforce the linkage between water, sanitation and health. This implies that coverage should be measured for availability of both water and sanitation for a household. It should not be monitored separately, i.e., a household can thus be categorized as having both water and sanitation, water only, sanitation only or none of either. At later stages, health practices can be included in the monitoring.
- 2) It should be reliable and involve the beneficiaries. This mechanism could provide the data quality control which is missing in existing systems. Distortion of information may occur when implementors are the monitors. The barangay will be the basic data capture level.
- 3) Monitoring will succeed only with interagency support, particularly in the initial stages. It should be accepted by all sector agencies. A unified set of figures and indicators will greatly help in planning.
- 4) It should be practical and implementable. It should start with the current monitoring capacity situation and move up with a clear vision of what the monitoring system should be. This implies phasing and gradual expansion and strengthening of the system and training of staff.
- 5) The system should be followed through with effective feedback. It should develop creative ways of providing feedback to the field. The current way in which data is processed is towards consolidation. The field sources' only feedback is, for example, national coverage figures. In the course of consolidation, opportunities for specific feedback useful to project implementors on performance are lost.

(4) Regarding sector development indicators, some important indicators will be more difficult to collect than others because the sector is not ready to gather them. The LGUs will group indicators into phases based on availability of data and/or ease with which such information can be collected with improved systems. A review of the objectives set for the sector almost exclusively shows a focus on coverage. It is important to get sector

objectives stated beyond coverage terms in order to encourage use of additional indicators. Based on past experience, requiring too much information leads to start-up difficulties. A three-phase build-up meeting sector requirements is outlined in the following sections:

1) Phase 1 Indicators

- Access to both adequate water and sanitation
- Water and sanitation associations duly organized to undertake sector activities
- Water and sanitation facilities in schools
- Capital development costs
- Sources of capital development funds
- Incidence of diarrhea
- Water availability and water quality maps
- Unit cost (per capita or per facility)

2) Phase 2 Indicators

- Household hygiene habits and practices
- Water stored in house covered? food covered? grounds free of faeces, garbage, wastewater cesspools? animals in the house? mother's and children's hands clean?
- Existence of barangay spot maps and facilities ledger cards
- Existence of O&M arrangements
- Current costs to households and willingness to pay for improved service

3) Phase 3 Indicators

- O&M Costs
- Financial efficiency and stability indicators
- Institutional development indicators
- Low-income groups benefiting from improvements

(5) NEDA has issued a Board Resolution in 1995 providing a practical definition of terms for planning and monitoring. The definitions were arrived at after exhaustive discussions and consensus with the implementing agencies.

(6) Recommended institutional responsibilities for sector monitoring: Monitoring is best left to parties not directly involved in delivery of the services. The best monitors are the community members themselves since accurate monitoring reports is in their best

interest. At the data capture level, the PHO structure, with its midwives and BIHW volunteers, is in the best position to take the lead in data gathering.

- 1) Provincial Level: The PPDOs, through its Research and Evaluation Division, will play the lead role in organizing the field data collection effort in coordination with the field offices of national agencies, NGOs and the water districts. The Monitoring Specialist, with the PST/PWSO, will assist the PPDO.
 - 2) Municipal Level: The Municipal Development Coordinator has the mandate of monitoring all development activities in the municipality. The municipal sector liaison will therefore coordinate the preparation of the reports with the MPDO, supported by PHO and NGOs, as needed.
 - 3) Barangay Level: There are several institutional options for leading the monitoring at the barangay level, such as the barangay health stations, the barangay council, etc. The municipal liaison will take the lead in establishing the barangay monitoring responsibilities.
- (7) Computerization of the system can come at later stages. This should be gradually phased in as the sector agencies strengthen their monitoring mode. This will also discourage a ground swell of requests for computer hardware. Computer facilities are available at the provincial level.
- (8) A new sector database program has been designed and currently under review. A Sector Database Center has been established within the DILG-PMO.

12.3 Project Monitoring

Project Monitoring Committees (PMCs) exist, pursuant to the Executive Order No.269, at the provincial and municipal levels tasked with the monitoring of local government projects funded from national and local government funds.

- (1) Scope and coverage: At the provincial level, monitoring includes projects classified under any of the following:
 - 1) foreign and nationally-funded projects which are implemented or located in two or several municipalities in the province or implemented or located in the province;
 - 2) other projects implemented and managed at the provincial level with funding generated from provincial sources.

- **Organization of Project Monitoring Committee (PMC):** The PMC established in each province is composed of representatives from different organizations, from NGOs, the administration, the ruling party and the opposition. From these representatives, the Provincial Governor selects the chairman and the others as members. The Provincial Planning and Development Office can be delegated to serve as the Secretariat and the PMC manages with the assistance of the non-government organizations in the monitoring and validation of project implementation.

(2) **Responsibilities:** The specific rules and responsibilities of the various units in the implementation of the monitoring system are as follows:

The Project Monitoring Committee :

- 1) Provides the list and schedule of all projects to be monitored to the NGOs involved in monitoring;
- 2) Collects and processes reports of implementors; NGOs monitor the status of project implementation for the information of the development council and next higher level project monitoring committee;
- 3) Pinpoint problems and verify information to be submitted for analysis and action of the development council;
- 4) Provide feedback on the remedial actions of the development council and follow-up their implementation;
- 5) Prepare and disseminate periodic project monitoring report on the status of project implementation; and
- 6) Elevate to higher level bodies problems/issues which are not resolved at their level.

The PMC Secretariat:

- 1) Prepare the monitoring program to be undertaken by the PMC during any given fiscal year, which will include, among others, the lists of projects and schedule of implementation based on submission of implementing agencies;
- 2) Provide chief executives with information on the projects to be monitored by the local PMC's;
- 3) Facilitate inter-agency, inter-governmental and field headquarters coordination whenever necessary.

The Project Implementors:

- 1) Submit periodic reports to the monitoring committee on the status of project implementation base on suggested reporting forms;

- 2) Provide authorized monitors assistance in getting access to more detailed information on project implementation (e.g. detailed work program);
- 3) Submit to next higher level office of line agency reports on status of implementation;
- 4) Implement/institute remedial measures on problems/issues identified as suggested by the development council.

(3) Process Flow

- 1) The PMC secretariat provides the NGOs with the monitoring plan, containing information on projects to be implemented at the provincial level;
- 2) PMC prepares its monitoring program for the calendar year;
- 3) Project implementors undertake projects, prepare and submit status reports on project implementation to the PMC;
- 4) NGOs project exception reports are submitted to the PMC, with copy furnished the project implementors;
- 5) PMC assesses reports of implementors and NGOs and conducts project visits of projects identified in the monitoring work program;
- 6) PMC processes reports of various implementors and provides the provincial development council with a consolidated report on status of project implementation in the province;
- 7) PMC evaluates problems, recommends solutions during its regular or special meetings, and refers same to the Provincial Development Council for appropriate action;
- 8) PDC assesses reports and takes proper action (problem solving, referral to appropriate agencies/council);
- 9) Implementors take remedial action on problems/issues encountered in project implementation. (If after a reasonable period of time, no remedial measures/ appropriate action have been taken on the problems referred to the concerned agency/local development council, the PMC forward the issue to that RDC.);
- 10) PMC provides feedback to concerned implementors, LGUs, NGOs, and other concerned agencies and follow-up implementation of remedial measures; and
- 11) PMC forwards consolidated status report on project implementation in the province to the Regional Project Monitoring Committee (RPMC).

(4) Frequency/Timing of Report Submission

The PMC determine the schedules for the submission of reports. Reports are submitted to the PMC who will forward the consolidated reports to the Provincial Development

Council (PDC). Submission of the consolidated report from the provincial PMC to the regional PMC is usually undertaken on a quarterly basis. The PMC furnishes the Provincial Governor with a copy of the reports for his reference and action.

12.4 Evaluation of Plan Implementation and Updating the PW4SP

- (1) This PW4SP should be updated at least every five years. This will be the responsibility of the PWSO in close coordination with the PPDO. Based on the sector monitoring reports, the PWSC will review the progress of the sector compared with objectives and the efficiency with which these objectives were achieved. This will be followed by a reformulation of objectives, strategies, new policies and policy revisions and an updated sector investment program.

- (2) To initiate the implementation of this sector monitoring system, the Phase I indicators (See 12.2) shall be used. Formats have been drafted for this purpose (See Table 12.4.1, Supporting Report). Specifically, the information to be collected are as follows:
 - 1) Access to both adequate water and sanitation as a measure of demand: This indicator can be taken from the Field Health Service Information System (FHSIS) Annual Environmental Sanitation Survey which are prepared by the PHO midwives. These annual surveys are summarized by municipality by the sanitary inspectors. NSO population projections will be utilized.
 - 2) Water and sanitation associations (RWSAs/BWSAs) organized: This indicator can be collected from the Cooperative Development Authority (Municipal or Provincial Chapters) in as much as all water cooperatives and/or associations are required to register with the CDA.
 - 3) Water and sanitation facilities in schools: This indicator can be collected from the various school district offices; consolidated at the division (provincial level). Although a system is in place for regular inventory of facilities by DECS, actual inventories are seldom implemented and the LGUs may have to institute a supporting data gathering activity.
 - 4) Capital development costs: The LGUs may have to gather information from the local DEO of DPWH, the various municipalities and the water districts.
 - 5) Sources of capital development funds: Data sources are the same as those of item 4).
 - 6) Incidence of diarrhea: This information can be taken from Form M-2 of the FHSIS. (Collection and processing of the data form is similar to that of item 1).
 - 7) Water availability and water quality maps: These maps should be continually updated based on field reports on water quality and quantity as they are received

from operations reports studies. Areas where, for example, salinity is increasing should be indicated. Areas suitable for shallow wells, for deep wells and for possible spring sources can be indicated.

- 8) At the conclusion of every project, the monitoring specialist prepares a report on actual unit costs incurred. This would include, for example, the cost of drilling for shallow or deep wells per meter depth; the cost of pipeline per linear meter, etc.
- (3) Municipal level consolidation: For every reporting period, the municipal sector liaison gathers all the barangay level data including those reports of the municipal health officer (and sanitary inspectors), the DECS division offices. A municipal sector report will be thus prepared. Further refinements of this report may be needed in view of future development initiated at the national level.

The municipal sector report is reviewed by the Mayor and then submitted to the Governor for further consolidation. Salient sections of this report would be furnished to DILG which is tasked with coordinating a national sector performance report for NEDA and for the President.

- (4) Feedback: Based on these reports, the PST/PWSO will draft a consolidated report on the performance of the sector during the period including the opportunities and constraints met and a set of recommendations for policy revision. Municipalities which have made outstanding progress and associations which have introduced creative innovations in its operations would be cited.

Annual reviews shall be organized to analyze not only the attainment on the physical project targets, but more significantly, whether the vision is being attained. These reviews could also provide the opportunity to sharpen or revise the vision and the mission statement and distill lessons learned from the implementation experiences.

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