

Chapter

**11**

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

## 11. FINANCIAL ARRANGEMENTS FOR MEDIUM-TERM DEVELOPMENT PLAN

### 11.1 General

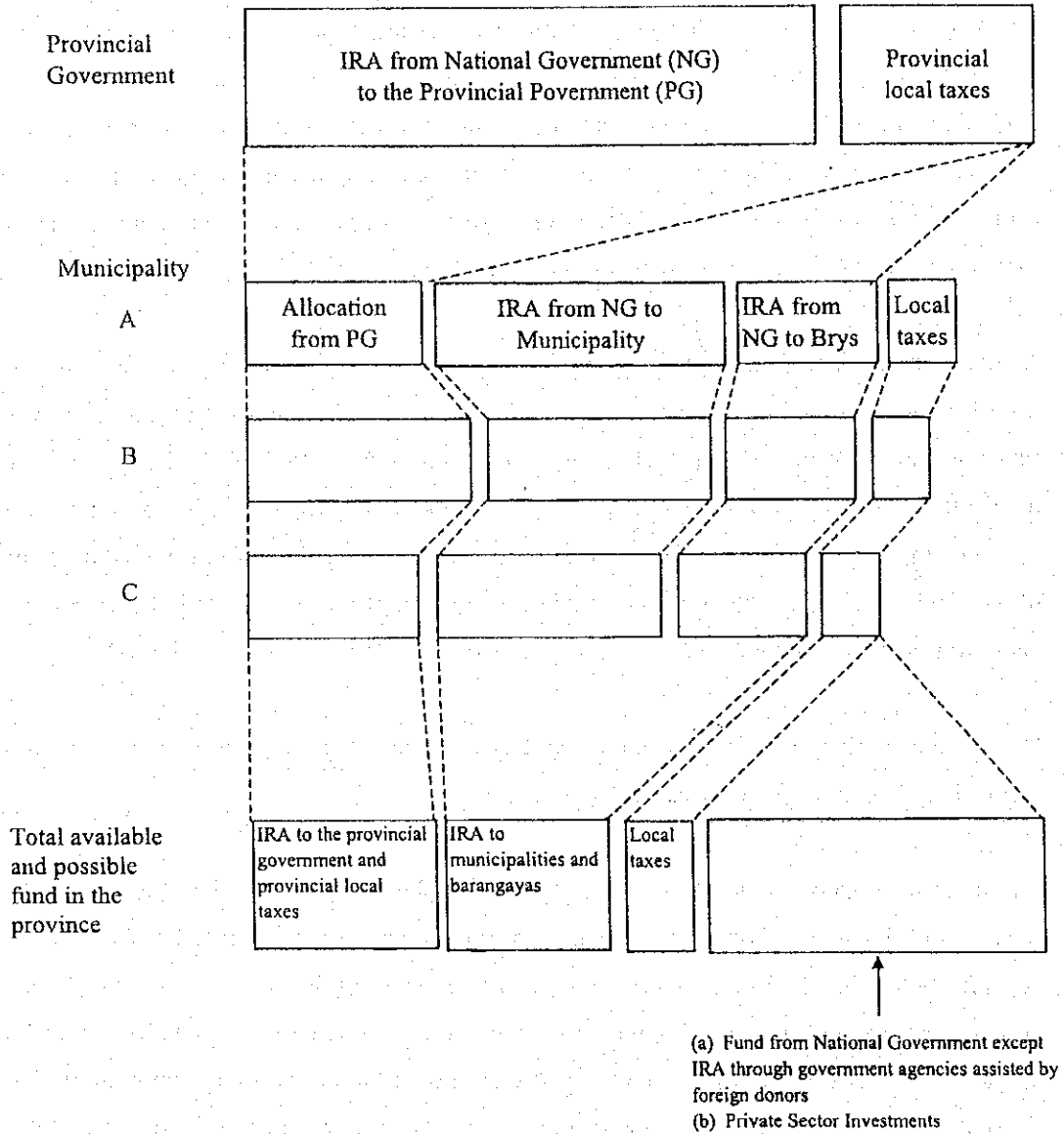
Financial arrangements to attain medium-term (Phase I) targets are sought taking into account potential funds. However, quantitative study is limited to the use of projected Internal Revenue Allotment (IRA). In this connection, this Chapter addresses to identify financial shortfall with reference to 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 with the 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 1998.

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 5<sup>th</sup> and 6<sup>th</sup> class municipalities up to a maximum of 50% of the total project cost. For sanitation facilities, the national government subsidy for 3<sup>rd</sup> to 6<sup>th</sup> 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.

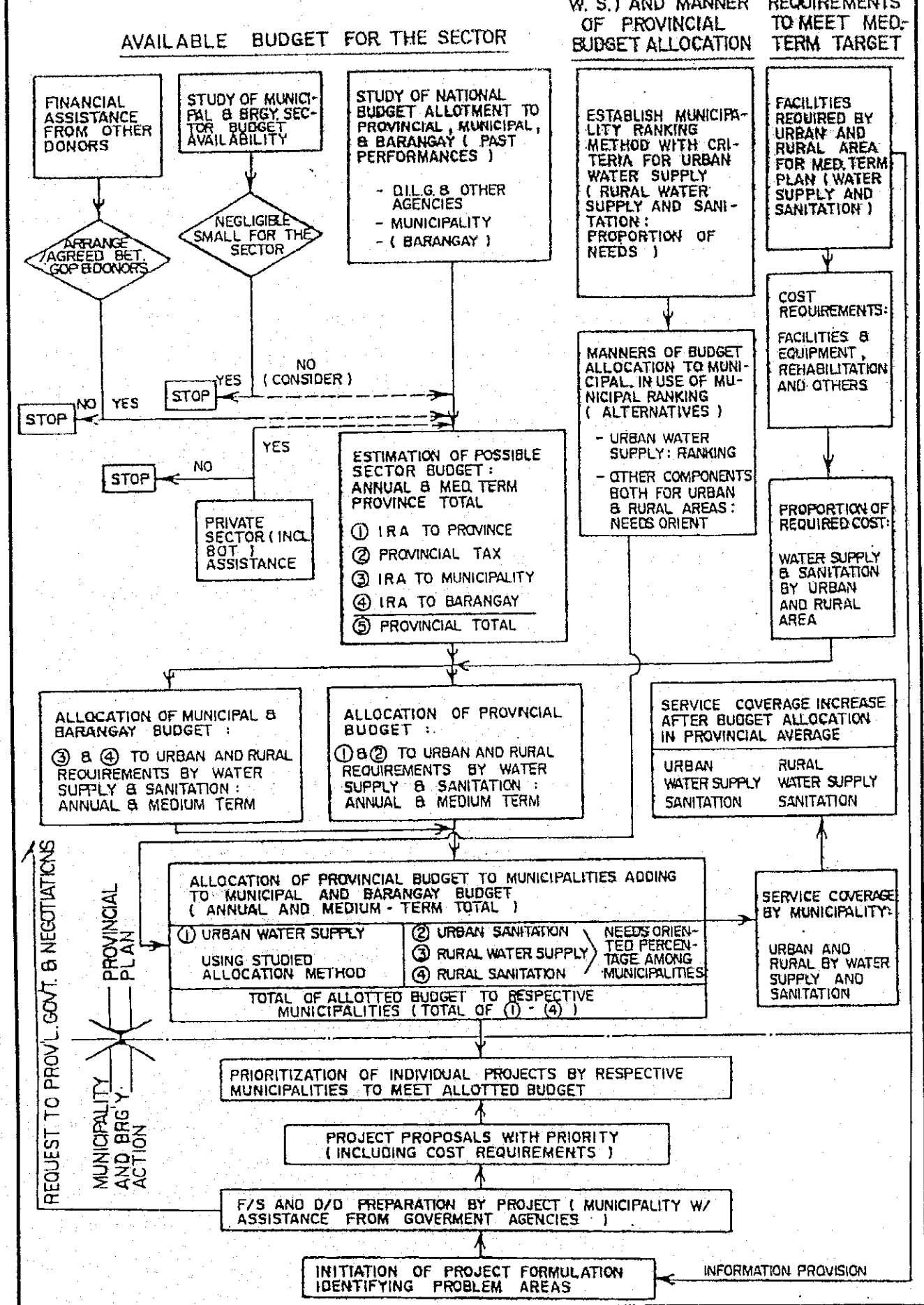
**Figure 11.1.1 Sector Budget Allocation**



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



## 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 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 IRA projection for the period 1999 to 2001 have been derived as equivalent to 40% of the total revenues of the actual National Internal Revenue Taxes of the 3<sup>rd</sup> Fiscal Year preceding the current year (e.g. 1996 to 1998). This 40% ratio is based on the Local Government Code in 1991. For the years 2002 to 2003, the projected National Internal Revenue Taxes by DOF served as basis for projecting the IRA for the same period.

### (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%

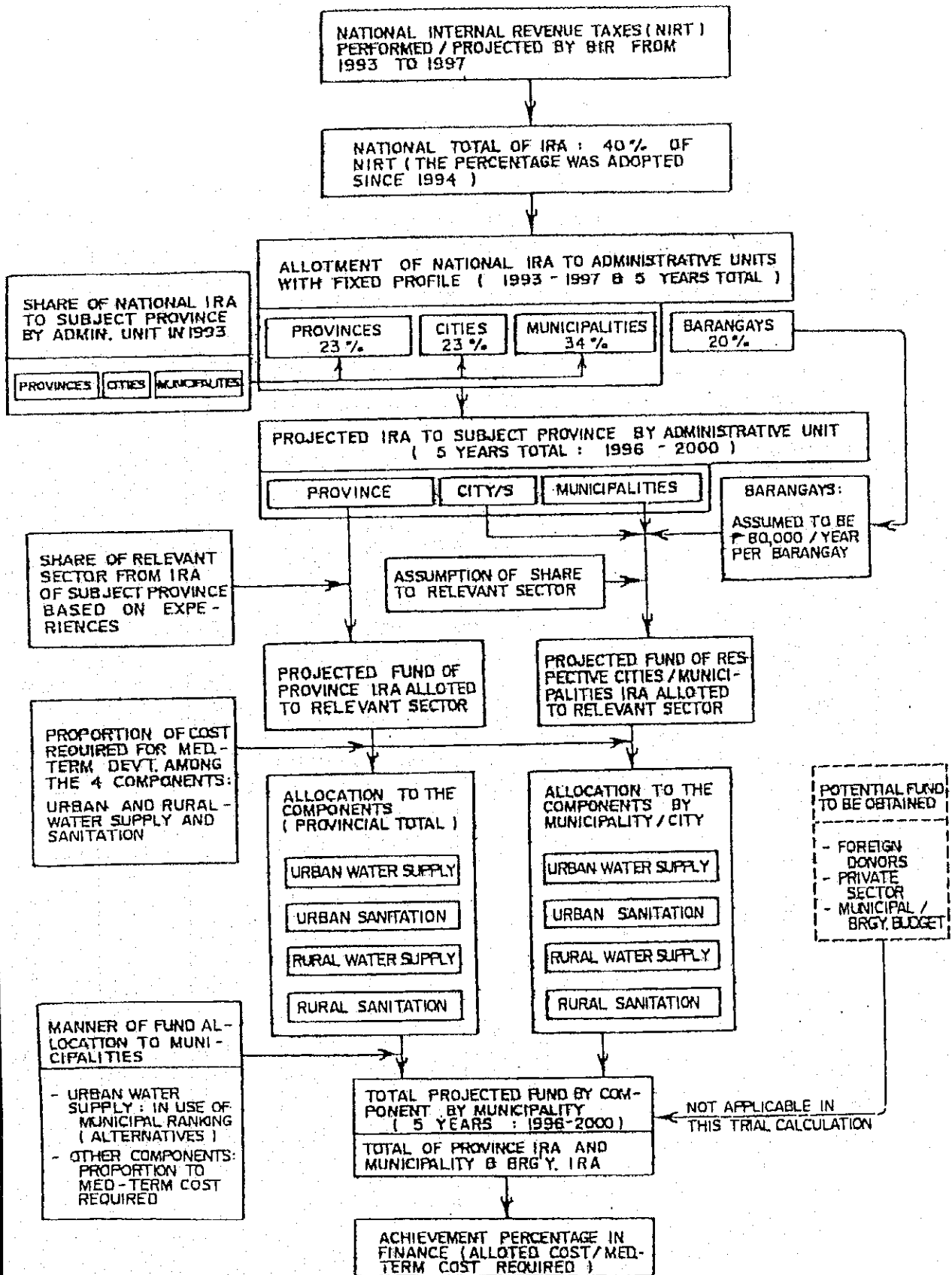
### (3) Distribution of national total IRA to the subject province by provincial, municipal and barangay level

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 0.514% of provincial IRA on the average was availed for the water supply and sanitation sector. This percentage is quite small, equivalent to 2.57% of the Development Fund. However, referring to the experience in other provinces, provincial allocation to the relevant sector is assumed to be

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, THUS REFERENCE INFORMATION IS SHOWN.

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

Unit: P 1,000

	1999	2000	2001	2002	2003	Total
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	249,195	273,277	304,141	334,735	373,784	1,535,132
(b) municipalities/city including barangays	362,063	395,522	438,404	480,911	535,164	2,212,064
Banga	41,222	45,036	49,923	54,768	60,952	251,902
Koronadal (Capital)	52,549	57,419	63,660	69,846	77,742	321,216
Lake Sebu	33,443	36,528	40,482	44,401	49,404	204,259
Norala	21,661	23,647	26,191	28,713	31,932	132,143
Polomolok	40,833	44,602	49,431	54,218	60,329	249,413
Santo Niño	18,271	19,959	22,123	24,268	27,006	111,626
Surallah	37,774	41,293	45,803	50,273	55,979	231,121
Tampakan	25,024	27,342	30,312	33,257	37,015	152,950
Tantangan	19,265	21,026	23,283	25,521	28,377	117,472
T'Boli	42,269	46,160	51,148	56,092	62,402	258,070
Tupi	29,752	32,512	36,048	39,553	44,028	181,893
(c) Provincial Total	611,258	668,799	742,545	815,646	908,947	3,747,196
4 Project fund of IRA to Relevant Sector by Administrative Unit						
(a) province	9,968	10,931	12,166	13,389	14,951	61,405
(b) municipalities/city including barangays	14,483	15,821	17,536	19,236	21,407	88,483
Banga	1,649	1,801	1,997	2,191	2,438	10,076
Koronadal (Capital)	2,102	2,297	2,546	2,794	3,110	12,849
Lake Sebu	1,338	1,461	1,619	1,776	1,976	8,170
Norala	866	946	1,048	1,149	1,277	5,286
Polomolok	1,633	1,784	1,977	2,169	2,413	9,977
Santo Niño	731	798	885	971	1,080	4,465
Surallah	1,511	1,652	1,832	2,011	2,239	9,245
Tampakan	1,001	1,094	1,212	1,330	1,481	6,118
Tantangan	771	841	931	1,021	1,135	4,699
T'Boli	1,691	1,846	2,046	2,244	2,496	10,323
Tupi	1,190	1,300	1,442	1,582	1,761	7,276
(c) Provincial Total	24,450	26,752	29,702	32,626	36,358	149,888

4%. This means that 20% of "20% Development Fund" from national IRA are counted on sector projects. The same percentage is applied for the allocation of municipal IRA to the sector.

**Table 11.2.2 Projected Allotment of IRA to the Relevant Sector by Component (1999-2003)**

Unit: ₱1,000

Allocation of IRA to Provincial Units	Urban Water Supply	Rural Water Supply	Urban Sanitation	Rural Sanitation	Total
1. Province	25,809	17,614	5,460	12,522	61,405
2. Municipalities	37,625	20,342	12,555	17,960	88,483
Banga		8,055	248	1,773	10,076
Koronadal (Capital)	11,387		695	767	12,849
Lake Sebu	2,603	2,954	465	2,148	8,170
Norala			3,673	1,613	5,286
Polomolok		3,325	3,696	2,956	9,977
Santo Niño	4,306	140	6	13	4,465
Surallah	4,764		1,666	2,815	9,245
Tampakan	4,373		663	1,082	6,118
Tantangan	3,585	492	162	460	4,699
T'Boli	3,736	4,185	539	1,863	10,323
Tupi	2,870	1,192	743	2,470	7,276
3. Provincial Total	63,434	37,956	18,015	30,482	149,888

(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 arranged in proportion to the direct construction cost required for Phase I development.

With regard 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 projected provincial IRA to the sector during the period of 1999-2003 is estimated at ₱149.89 million, which is equivalent to 4% of combination of provincial and municipal IRA. This percentage arrived as a result of adjustment in use of IRA for those municipalities, of which required cost is lower than allotted IRA. With regard to the allocation to sub-sectors, urban water supply has the largest allotment of 42.32% (₱63.43 million



out of the total ₱149.89 million) followed by rural water supply (25.32%). Rural sanitation is allotted ₱ 30.48 million (about 20.34%) and is larger than that for urban sanitation (₱ 18.02 million). The proportion of IRA allotment for the sub-sectors differs by municipality and depends on their priority sub-sectors.

In the allocation of municipal IRA, Koronadal (capital) has the largest allotment with ₱12.85 million (14.5%) followed by the municipality of T'boli (11.7%).

### 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; 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 ₱391.29 million required for Phase I (1999-2003), IRA can fund only ₱149.9 million or 38.31% of the requirements. Hence, there is a big shortfall of ₱241.41 million in funding. It will become ₱297.02 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 originating from IRA against Phase I financial requirements. The percentage of Norala (94%) is the highest among municipalities, followed by Banga (77%). Majorities are in the range between 49% and 62% to the respective requirements, while the provincial average is 38%.

**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
<b>Direct Cost</b>							
<i>1. Direct Construction Cost</i>							
<i>Urban Water Supply</i>							
Level III System	0	22,422	33,634	33,634	22,422	112,112	721,876
<i>Rural Water Supply</i>							
Level II System	12,533	12,533	0	0	0	25,066	0
Level I Facilities	0	10,289	15,434	15,434	10,289	51,446	287,719
<i>Urban Sanitation</i>							
Household toilet	0	108	162	162	108	541	96
Public school toilet	0	3,947	5,921	5,921	3,947	19,735	23,299
Public toilet	0	688	1,032	1,032	688	3,441	4,817
Disinfection of Level I Deep Well and Shallow	96	175	175	175	175	797	0
<i>Rural Sanitation</i>							
Household toilet	0	737	1,105	1,105	737	3,684	8,248
Public school toilet	0	10,142	15,213	15,213	10,142	50,709	166,105
Disinfection of Level I Deep Well and Shallow	212	389	389	389	389	1,769	297
<i>Urban Sewerage</i>	N/A	N/A	N/A	N/A	N/A	N/A	1,177,775
Sub-total	12,841	61,431	73,065	73,065	48,898	269,299	2,390,231
<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	22	33	33	22	110	0
Water quality testing kit	0	3	5	5	3	15	0
Sub-total	0	895	38	38	25	995	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	16,266	7,360	0	0	0	23,626	108,379
Construction supervision	501	2,401	2,849	2,849	1,900	10,625	48,168
<i>Institutional Development</i>	7,025	6,689	3,681	2,177	1,840	21,411	108,379
Sub-total	23,792	16,449	6,530	5,026	3,740	55,661	264,926
Total Direct Cost	38,664	78,775	79,632	78,128	52,663	327,987	2,681,939
<b>Contingencies</b>							
<i>1. Physical Contingency</i>	3,866	7,878	7,963	7,813	5,266	32,786	268,194
<i>2. Price Contingency</i>	2,977	12,556	19,713	26,710	23,319	85,276	N.A
<i>3. Value-Added Tax (VAT)</i>	3,164	7,209	7,595	7,595	5,082	30,645	N.A
Total Investment Cost	48,672	106,418	114,903	120,246	86,331	476,694	2,950,133
<b>Total Investment Cost (excluding Price Contingency)</b>	45,694	93,862	95,191	93,536	63,011	391,294	2,950,133

**Table 11.3.2 Additional Fund Requirement for the Medium-Term Plan**

Unit: 1,000 pesos

Item	1999	2000	2001	2002	2003	Total 1999-2003
Financing Requirement	45,694	93,862	95,191	93,536	63,011	391,294
Expected available fund						
National						
Local (IRA)	24,450	26,752	29,702	32,626	36,358	149,888
Others						
Total	24,450	26,752	29,702	32,626	36,358	149,888
Shortfall in funding	21,244	67,110	65,489	60,910	26,654	241,407
(Additional Fund Requirements)	22,731	76,834	80,227	79,841	37,383	297,016

Notes: Shortfall in funding: above figures indicate current year price level.  
below figures indicate escalated price 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		Urban Sanitation				Rural Sanitation		Available Fund of Municipality (a)				
	Allotted from Provincial Government	Allotted Municipality Fund	Total	Allotted from Provincial Government	Allotted Municipality Fund	Total			Allotted from Provincial Government	Allotted Municipality Fund		Total			
Banga				2,054	8,055	10,109	63	248	311	452	1,773	2,225	12,645	16,370	77
Koronadal (Capital)	1,290	11,387	12,677	4,773	2,954	7,727	252	695	947	279	767	1,046	14,670	29,753	49
Lake Sebu	3,871	2,603	6,475				751	465	1,216	3,472	2,148	5,620	21,038	84,137	25
Norala							734	3,673	4,407	323	1,613	1,936	6,343	6,736	94
Polomolok				880	3,325	4,205	979	3,696	4,675	783	2,956	3,739	12,619	16,836	75
Santo Niño	3,871	4,306	8,177	62	140	201	3	6	9	6	13	19	8,407	12,576	67
Surallah	1,290	4,764	6,054				759	1,666	2,426	1,283	2,815	4,097	12,577	26,847	47
Tampakan	3,871	4,373	8,245				334	663	997	545	1,082	1,628	10,869	19,652	55
Tantangan	3,871	3,585	7,457	247	492	739	81	162	244	231	460	690	9,129	15,037	61
Tboli	3,871	3,736	7,608	9,059	4,185	13,244	1,166	539	1,705	4,033	1,863	5,896	28,452	142,400	20
Tupi	3,871	2,870	6,741	539	1,192	1,731	336	743	1,079	1,116	2,470	3,586	13,138	20,950	63
Total	25,809	37,625	63,434	17,614	20,342	37,956	5,460	12,555	18,015	12,522	17,960	30,482	149,887	391,294	38

## 11.4 Medium-Term Implementation Arrangements

The 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 the 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.

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 the available fund and sector targets.

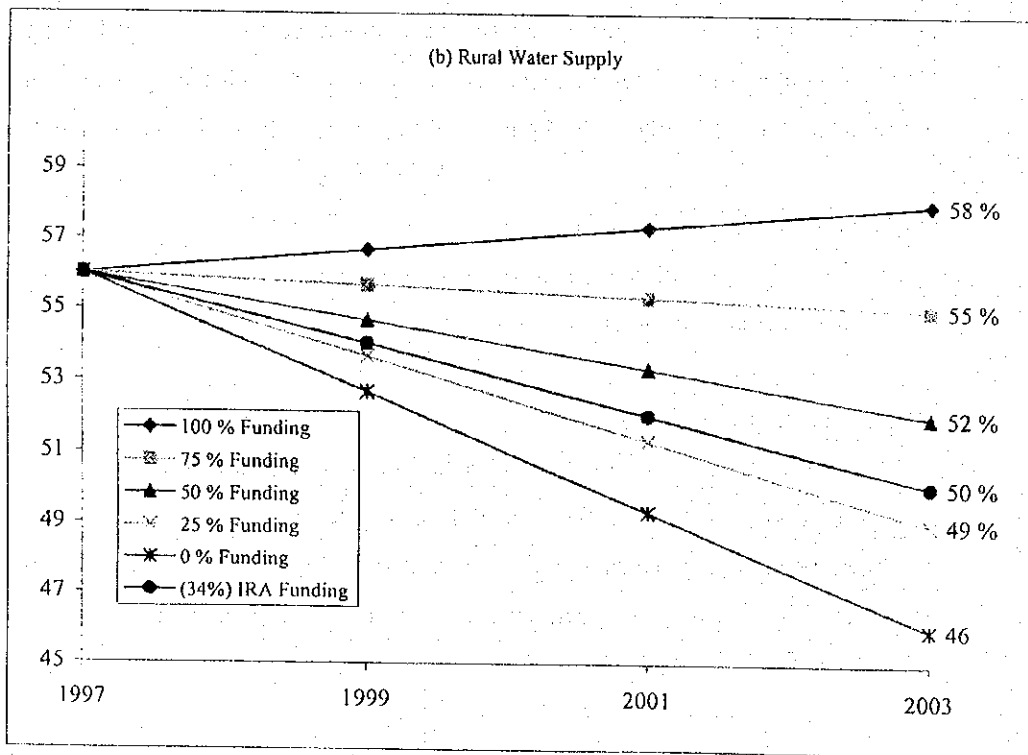
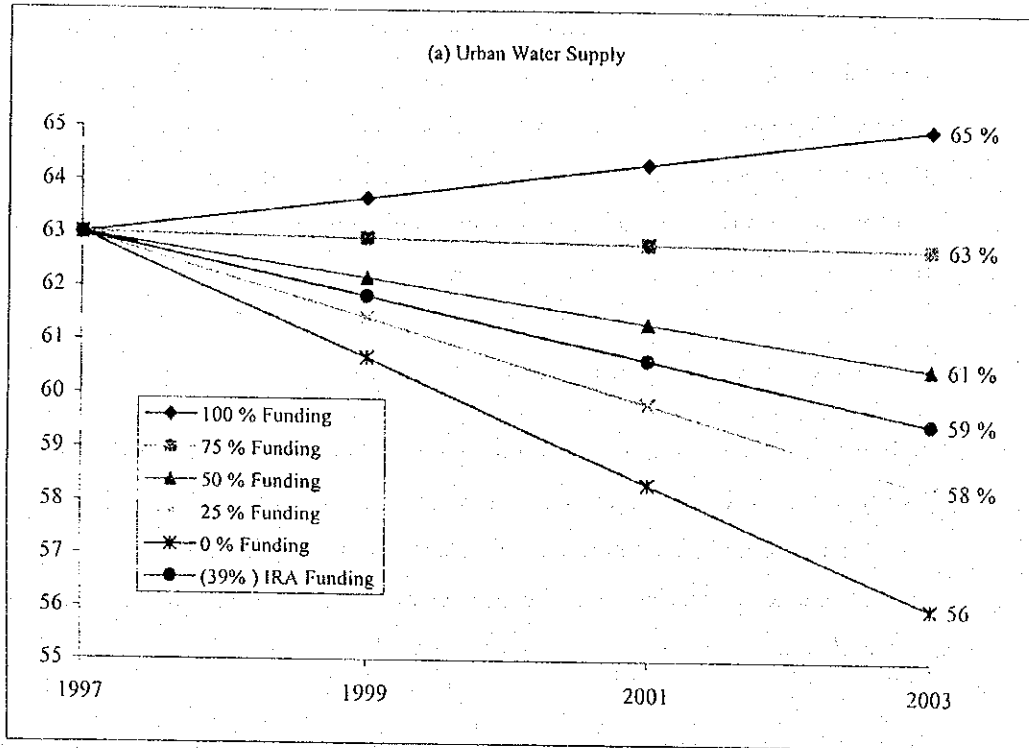
#### (1) The First Reference Scenario

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

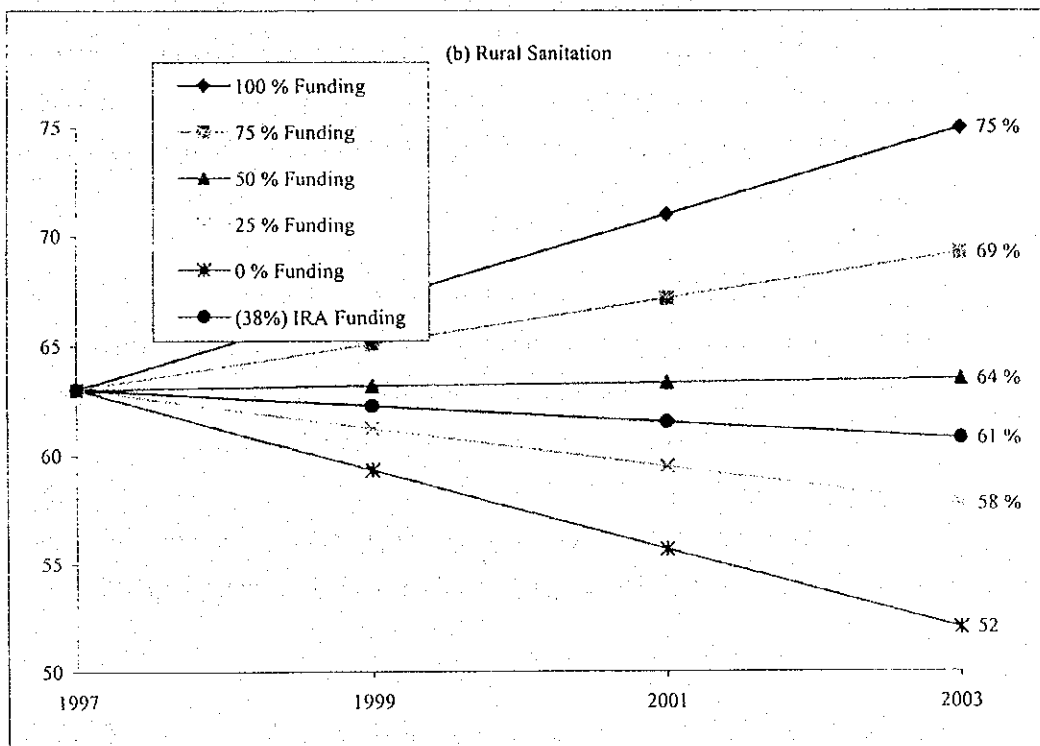
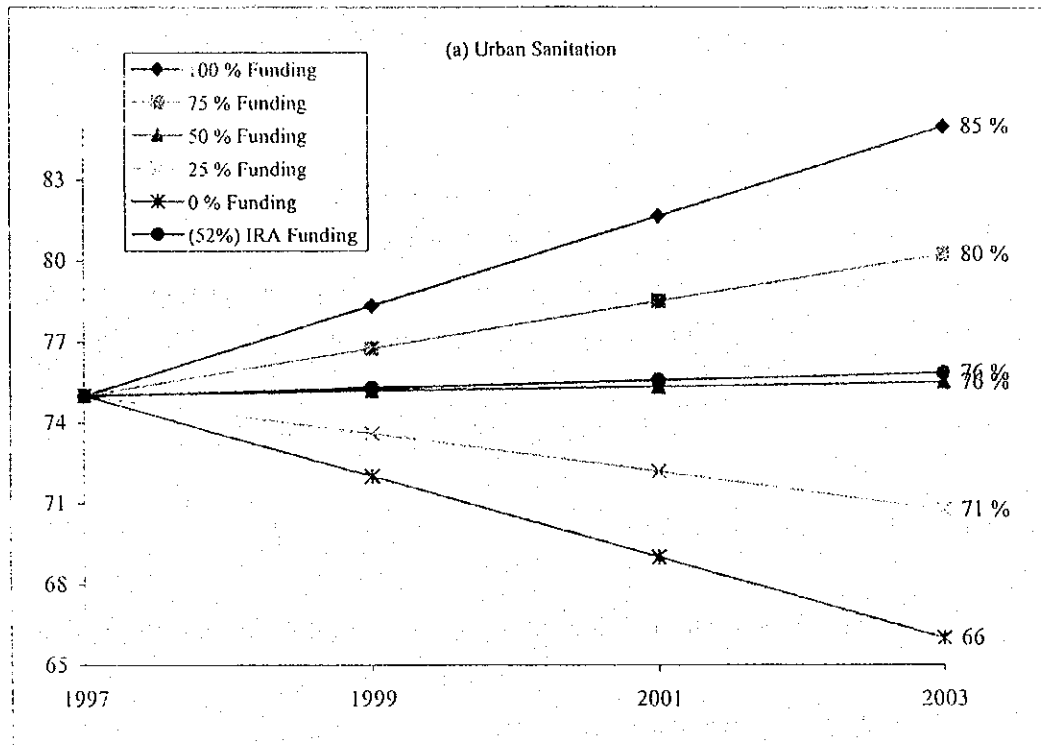
An intermediate scenario with 50 - 75 %-funding ranges are considered. Urban and rural water supply coverage in the year 2003 is attained between 61-63% and between 52-55 %, respectively. For urban and rural sanitation (household toilets), coverage will reach 76-80% and 64-69%, respectively based on the assumption that the required private investments are followed.

**Figure 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

**Figure 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

In the scenario of 25% funding against the total requirements of Phase I, urban and rural water supply coverage in the year 2003 will be attained at 58% and 49%, respectively, while, urban and rural sanitation coverage will be at 71% and 58%. All sub-sectors will not be able to keep current service levels.

The allocated IRA funding of urban and rural water supply in the year 2003 will be 39% and 34% which will cover 59% and 50% of the population. In order to attain the Phase I development target of 65% and 58% service coverage, it needs an additional IRA funding of 61% and 66%, respectively. While for urban and rural sanitation the allotted IRA funding are 39% and 34%. To cover the Phase I development target of 85% and 75% of the population it requires an additional IRA funding of 48% and 62%, respectively.

#### 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 sector 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 that will use 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 municipality with the application of weighing method. Adopted weight to the factor (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 six (6) municipalities identified as top priority, namely: T'Boli, Lake Sebu, Santo Niño, Tampakan, Tantangan and Tupi.

With reference to the provincial fund allocation, it is assumed that 90% of the fund for urban water supply from provincial government is equally distributed up to the third ranking municipalities, while the remaining 10% are equally distributed to the rest of the municipalities. The result of distribution is shown in Table 11.4.2. The available funds for all the municipalities are all inadequate to cover the Phase I requirements.

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 T'Boli, which indicates that it is given priority for investments in all sub-sectors, Norala is the least priority in terms of investment.

**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 Unserved Population in Base Year	% of Underserved and Unserved Population in Phase I	% of Population Unserved by Level III Systems in Base Year	Underserved and Unserved Population in Base Year	Underserved and Unserved Population in Phase I	Population Unserved by Level III Systems in Base Year			
Banga	25	32	100	0.60	0.60	1.00	0.66	9	
Koronadal (Capital)	39	43	95	0.80	0.60	1.00	0.76	7	
Lake Sebu	71	80	100	1.00	1.00	1.00	1.00	1	
Norala	23	30	58	0.60	0.40	0.60	0.53	10	
Polomolok	23	27	43	0.60	0.40	0.60	0.53	10	
Santo Niño	44	47	100	1.00	0.80	1.00	0.93	3	
Surallah	36	43	90	0.80	0.60	1.00	0.76	7	
Tampakan	50	55	100	1.00	0.80	1.00	0.93	3	
Tantangan	45	52	100	1.00	0.80	1.00	0.93	3	
T'Boli	65	80	100	1.00	1.00	1.00	1.00	1	
Tupi	45	48	83	1.00	0.80	1.00	0.93	3	
<b>Provincial Total</b>	<b>37</b>	<b>44</b>	<b>81</b>						

Note: 1. Scoring to Underserved and Unserved Percentage.

2. Weight Allocation to Score.

Score	Range of Underserved and Unserved Percentage				Allocated Weight					
1.0	41	< %	61	< %	81	< %	50	35	15	Allocated Weight
0.8	31	< %	40	< %	60	< %	61	< %	80	
0.6	21	< %	30	< %	45	< %	41	< %	60	
0.4	11	< %	20	< %	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 pesos

Ranking	Name of Municipality	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 (%)				
9	Banga						
7	Koronadal (Capital)	1,290	5.00	11,387	12,677	26,368	48.08
1	Lake Sebu	3,871	15.00	2,603	6,475	26,809	24.15
10	Norala						
10	Polomolok						
3	Santo Niño	3,871	15.00	4,306	8,177	12,127	67.43
7	Surallah	1,290	5.00	4,764	6,054	13,834	43.76
3	Tampakan	3,871	15.00	4,373	8,245	14,048	58.69
3	Tantangan	3,871	15.00	3,585	7,457	11,473	64.99
1	T'Boli	3,871	15.00	3,736	7,608	51,543	14.76
3	Tupi	3,871	15.00	2,870	6,741	8,264	81.58
Total		25,809	100	37,625	63,434	164,466	38.57

**Table 11.4.3 Municipal Investment Need Ranking**

Name of Municipality	Weighted Score by Sub-sector					Synthetic Municipal Investment Need Ranking
	Urban Water Supply	Rural Water Supply	Urban Sanitation	Rural Sanitation	Total Weighted Score	
Banga	0.17	0.15	0.05	0.05	0.42	10
Koronadal (Capital)	0.19	0.10	0.20	0.25	0.74	4
Lake Sebu	0.25	0.15	0.20	0.25	0.85	2
Norala	0.13	0.05	0.15	0.05	0.38	11
Polomolok	0.13	0.15	0.10	0.10	0.48	9
Santo Niño	0.23	0.10	0.15	0.05	0.53	7
Surallah	0.19	0.10	0.15	0.05	0.49	8
Tampakan	0.23	0.25	0.15	0.10	0.73	5
Tantangan	0.23	0.10	0.20	0.10	0.63	6
T'Boli	0.25	0.25	0.25	0.25	1.00	1
Tupi	0.23	0.15	0.20	0.25	0.83	3

## 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.

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 1<sup>st</sup> batch provinces for preparation of the PW4SP. The implementation of a packaged project may be realized in the near future.

### 11.5.1 Project Components

#### (1) Water Supply and Sanitation Component

Since all municipalities of the province fall on 1<sup>st</sup> to 4<sup>th</sup> class municipalities, there is no water supply component to meet the conditions in provision of GOP-assisted Level I water supply in the rural areas (limited to 5<sup>th</sup> and 6<sup>th</sup> municipalities).

While, there are seven (7) municipalities that meet the condition for GOP-assisted projects (limited to 3<sup>rd</sup> to 6<sup>th</sup> municipalities) in sanitation sub-sector. The sanitation component comprises 14,832 units of toilet bowl by distributing toilet molds (pour flush type only), 5 public toilets and 117 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 toilets 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) 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 finalization of 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 work, community organizing and training.

## (3) 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. 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 (not applicable to the province) and even 70% of NG share for 5<sup>th</sup> and 6<sup>th</sup> 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 <sup>st</sup> to 4 <sup>th</sup>	0		No GOP grants for Level II & III water
	5 <sup>th</sup> to 6 <sup>th</sup>	50		
Sanitary Support Faci. for Public Markets and Slaughterhouses	1 <sup>st</sup> to 2 <sup>nd</sup>	0		
	3 <sup>rd</sup> and 4 <sup>th</sup>	50		
	5 <sup>th</sup> and 6 <sup>th</sup>	70		

## (2) Financial Viability

### 1) Conditions and Assumptions for Financial Study

- The cost sharing between the GOP and LGUs is assumed to be 50% : 50% of the overall project cost. 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 is estimated at about ₱85.6 million (₱60.3 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.

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

(Unit: Peso)

Category	Qty.	Unit Cost	Amount	GOP		LGU
				Foreign Loan	GOP/CP	
<b>A. Const. &amp; Civil Works</b>						
<b>Water Supply</b>						
1. Deep Well (40m)	0		0			
2. Deep Well (80m)	0		0			
3. Deep Well (120m)	0		0			
4. Shallow Well	0		0			
5. Spring Development	0		0			
Sub-total a			0	0		0
<b>Sanitation</b>						
1. HH Latrines	14,832	700	10,382,400			
2. School Toilets	117	274,100	32,069,700			
3. Public Toilets	5	344,100	1,720,500			
Sub-total b			44,172,600	16,775,192		27,397,408
<b>Land acquisition</b>						
Land acquisition & Right of Way			0			0
Sub-total A			44,172,600	16,775,192		27,397,408
<b>B. Equip./Logistic Support</b>						
1. Support Vehicle	0	590,000	0	0		
2. Well Rehab. Eqt.	0	280,000	0	0		
3. Maintenance Tools	0	10,000	0	0		
4. Water Quality Test Kits	0	15,300	0	0		
Sub-total B			0	0		
<b>C. Consultancy Services</b>						
1. Hydrogeological Survey			0	0		
2. D/D and Const. Sv.			4,858,986	4,858,986		
Sub-total C			4,858,986	4,858,986		
<b>D. Institutional Devt.</b>						
1. Capacity Enhanc. Prog.	L.S.		3,200,000	2,650,000	550,000	
2. Commu. Manag. Prog.	99	10,770	1,066,230	358,253	707,977	
3. Health & Hygiene Educ.	99	1,800	178,200		178,200	
4. Water Quality Surveil.	0	700	0		0	
5. NGO Assistance	99	1,200	118,800		118,800	
6. Administrative Support	L.S.		1,200,000		1,200,000	
Sub-total D			5,763,230	3,008,253	2,754,977	
<b>E. Physical Contingency</b>			5,479,482	2,464,243	275,498	2,739,741
<b>Total (A+B+C+D+E)</b>			60,274,298	27,106,674	3,030,474	30,137,149
<b>GOP Total</b>					30,137,149	
<b>LGUs</b>						28,328,920
<b>Equity</b>						1,808,229
<b>LGUs + Equity</b>						30,137,149
<b>F. Others</b>						
1. Price Contingency			23,159,063	11,021,168	1,109,021	11,028,874
2. Value Added Tax (VAT)			2,163,418		2,163,418	
Sub-total F			25,322,481	11,021,168	3,272,438	11,028,874
<b>Grand Total</b>			85,596,778	38,127,843	6,302,913	41,166,023

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.

### 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 to be considered in the 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 the current financial capability of the municipalities.
- 5-year development program (from 1999 to 2003) is applied to increase project funds using the available IRA.

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 sanitation sub-sector, IRA to municipalities with income classification of 3<sup>rd</sup> to 6<sup>th</sup> classes is counted. The IRA allotted to the province are divided into two groups; class 1<sup>st</sup> to 2<sup>nd</sup> and class 3<sup>rd</sup> to 6<sup>th</sup> in proportion to the construction cost required. The provincial IRA for the eligible municipalities is considered for this project.

The total IRA of the province available for the eligible municipalities in the sanitation sub-sector was estimated at ₱ 28.642 million, as a total of 5-year development program, in combination of available IRA allotted to urban and rural sanitation (details are included in Table 11.5.1, 11.5.2 and 11.5.3, Supporting Report). The available IRA is shown below:

<u>Sub-sector</u>	<u>Provincial IRA</u>	<u>Municipal IRA</u>	<u>Total</u>
Rural Sanitation:	6,145,000	9,560,000	15,705,000
Urban Sanitation:	3,282,000	9,656,000	12,937,000
Total:	9,427,000	19,216,000	28,642,000



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

The comparison shows that the projected available IRA, as the provincial total aggregated with the assumption of 5-year development programs, meets the cost to be shared by the respective 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 45% or ₱27.1 million and 5% or ₱3.0 million of the government counterpart fund. The remaining 50% of the overall cost shall be shared between the LGUs with share of 47% or ₱28.3 million and beneficiaries to contribute 3% or ₱1.8 million.

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

Financial Source	X 1,000 Peso	Percentage		Remarks
GOP	3,030	5	50	GOP counterpart
	27,107	45		Foreign Loan
LGUs	28,329	47	50	IRA
	1,808	3		Equity of beneficiaries
<b>Total</b>	<b>60,274</b>	<b>100</b>		

Under this case, the cost to be shouldered by the LGU meets the available IRA (₱28.6 million).

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 to be shared by the LGU). 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 manageable IRA will not be able to fill up the cost requirement of the project. Table 11.5.4 shows the 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 Peso	Percentage			Remarks
GOP	3,030	5	5	50	GOP counterpart
	27,107	45	75		Foreign Loan
	(18,082)	(30)			Foreign Loan for MDF
LGUs	10,247	17	47	50	IRA
	18,082	30			MDF through Foreign Loan
	1,808	3	3		Equity of beneficiaries
<b>Total</b>	<b>60,274</b>	<b>100</b>			

Under this case, the IRA to be used by the LGU is 36% of the available IRA estimated in the previous study (₱28.6 million).

GOP can possibly finance up to ₱45.2 million or 75% of the total project cost in the form of a loan. Out of the GOP finance through the loan, ₱27.1 million or 45% of the total project cost shall be granted to the LGUs, aside from the 5% GOP counterpart fund. The remaining ₱18.1 million or 30% 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	1 <sup>st</sup>	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
<b>Project Implementation</b>																				
1. Detailed Design	█	█	█	█																
2. Community Development/		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3. PQ, Bidding and Contractor Selection				█	█	█	█													
4. Procurement and Delivery of Materials and Equipment							█	█	█	█										
5. Construction of 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 about 8 pesos per household in the base year price level (refer to 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 (refer to affordability in Chapter 6), 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 for O&M cost is ₱8 per household per month, which is less than 1% of the median monthly household income of ₱4,984 in 1997. However, the users will have to pay water charge of up to 2% of their monthly income or ₱100 /household/month to manage not only for repair of hand-pump, but also rehabilitation and reconstruction of deep well, assuming that well life is 20 years.

### (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 2,715 to meet the target (refer to Table 8.5.1; population to be served of 13,549 people and household size of 4.99 persons). The average capital cost to be paid is estimated at ₱9,232 per household (refer to Chapter 10 Main Report and Supporting Report). Applying the capital recovery factor to the capital costs with conditions of 7% interest rate and 25 years repayment period, the monthly payment amounts to about ₱66 per household.

The annual recurrent cost per household is estimated to be ₱180 (₱15/household/month) in the base year (refer to Chapter 10). It will reach to about ₱22.50 in the year 2003 at

an annual inflation rate of 7%. Thus, the total amount of repayment and recurrent cost in the year 2003 is about ₱89.00, which is about 1% of the family income as shown below.

(a) Estimated water rate (flat rate; Pesos)	:	89.00
(b) Percentage of (a) to monthly median household income in 2003 <sup>1)</sup>	:	1.2%
(c) Percentage of (a) to monthly low household income in 2003 <sup>2)</sup>	:	1.4%

Notes:

- 1) Provincial average monthly median income in 2003 (₱7,480 per household) is derived from 1994 Family Income and Expenditure Survey considering annual inflation rate of 7%. The monthly median income in 1997 is ₱4,984.
- 2) Provincial average monthly low income in 2003 (₱6,523 per household) is estimated using the NSO data. The monthly low income in 1997 is ₱4,347.

### (3) Level III water supply systems

A full recovery of capital and operation & maintenance 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; 15m<sup>3</sup> per household) and projected income in year 2003. Total capital cost of Level III water supply system is ₱112.112 million for 6,180 households to be served. Assuming an annual inflation rate of 7% and 25 years repayment period, the annual capital cost to be paid is about ₱1,557 per household. The monthly capital cost to be paid by each household is about ₱130.

The monthly recurrent cost per household is estimated to be ₱57 (₱680/ year, refer to recurrent cost in Chapter 10 where operating cost, etc. is ₱9.549 million in the base year for a total of 14,043 households). Using an annual inflation rate of 7%, this recurrent cost is projected to be about ₱85 per household in the year 2003.

The combined amount of capital repayment and recurrent cost in the year 2003 is ₱215/ household/month. The cost shall be recovered as a monthly water charge to be paid by users. The percentage of the water rate against income with more or less 5% is commonly affordable.

(a) Estimated water rate for 15 m <sup>3</sup> (Pesos) <sup>1)</sup>	:	215.00
(b) Estimated minimum water rate (1-10 m <sup>3</sup> ) (Pesos) <sup>2)</sup>	:	143.00
(c) Percentage of (a) to monthly median household income in 2003	:	2.9%
(d) Percentage of (a) to monthly low household income in 2003 <sup>3)</sup>	:	3.3%
(e) Percentage of (b) to monthly low household income in 2003	:	2.2%

Notes:

- 1) Water rate for the HH with monthly consumption rate of 10m<sup>3</sup> is estimated under the same assumption of a).
- 2) Monthly median household income is ₱7,480 and the low household income is ₱6,523 in the year of 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 toilet shall be managed by individual household. 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 shall be considered. 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.

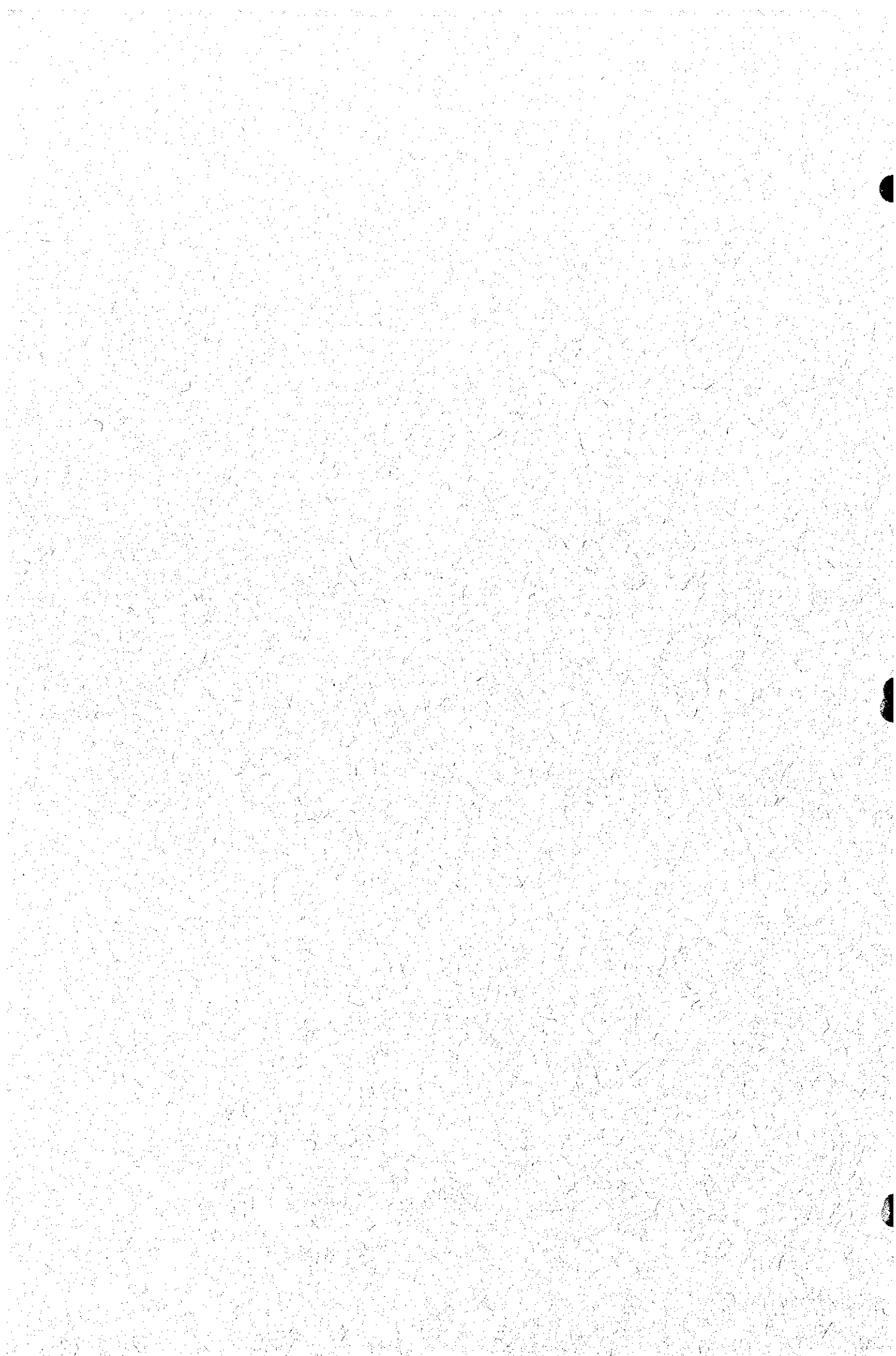
(a) Repayment for Flush Type (Pesos)	:	468
(b) Repayment for Pour Flush Type (Pesos)	:	286
(c) Percentage of (a) to monthly median household income in 2003 <sup>1)</sup>	:	6.3%
(d) Percentage of (b) to monthly low household income in 2003 <sup>2)</sup>	:	4.4%

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.

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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 (under-runs), 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 the 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 objec-

tives 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 diarrhoea
- 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 are for their best

interest. At the data capture level, the PHO structure, with its midwives and BHW 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. The system has been successfully piloted in 3 provinces and replication in other priority provinces will begin shortly.

### 12.3 Project Monitoring

Project Monitoring Committees (PMCs) exist 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.

(2) 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.

(3) 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.

(4) 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).

(5) 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 their 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.

