
**FUTURE REQUIREMENTS
AND DEVELOPMENT PLAN**

B

8. FUTURE REQUIREMENTS IN WATER SUPPLY AND SANITATION
IMPROVEMENT

8.2 Targets of Provincial Sector Plan

Table 8.2.1 Estimation of Base Year Service Coverage of Water Supply

| Name of Municipality | Area | Population (1997) | Population Served by 1997 Facilities | | | | Population to be Served by Planned On-going Projects | | | | Population Served in the Base Year (1997) | | | | Percentage Coverage |
|-----------------------------|-------|-------------------|--------------------------------------|----------|---------|---------|--|----------|---------|--------|---|----------|---------|-------|---------------------|
| | | | Level III | Level II | Level I | Total | Level III | Level II | Level I | Total | Level III | Level II | Level I | Total | |
| Bansalan | Urban | 6,077 | 6,247 | | | 6,247 | | | | 6,247 | | | 6,247 | 93 | |
| | Rural | 42,918 | 7,513 | 2,968 | 15,184 | 25,662 | | | | 7,513 | 2,968 | 15,184 | 25,662 | 60 | |
| | Total | 49,615 | 13,760 | 2,968 | 15,184 | 31,909 | | | | 13,760 | 2,968 | 15,184 | 31,909 | 64 | |
| Digos (Capital) | Urban | 41,880 | 30,408 | | 6,778 | 37,276 | | | | 30,408 | | 6,778 | 37,276 | 89 | |
| | Rural | 68,436 | 3,735 | 2,830 | 47,067 | 53,632 | | | | 3,735 | 2,830 | 47,067 | 53,632 | 78 | |
| | Total | 110,322 | 34,233 | 2,830 | 53,845 | 90,908 | | | | 34,233 | 2,830 | 53,845 | 90,908 | 82 | |
| Dun Murodino | Urban | 11,181 | | 934 | 4,469 | 5,903 | | | | | 934 | 4,469 | 5,403 | 48 | |
| | Rural | 20,227 | | 1,318 | 879 | 2,197 | | | | | 1,318 | 879 | 2,197 | 11 | |
| | Total | 31,408 | | 2,252 | 5,348 | 7,600 | | | | | 2,252 | 5,348 | 7,600 | 24 | |
| Hugueny | Urban | 6,751 | 3,239 | 1,672 | 1,684 | 6,595 | | | | 3,239 | 1,672 | 1,684 | 6,595 | 98 | |
| | Rural | 36,595 | | 150 | 33,793 | 33,943 | | | | | 150 | 33,793 | 33,943 | 93 | |
| | Total | 43,346 | 3,239 | 1,822 | 35,477 | 40,538 | | | | 3,239 | 1,822 | 35,477 | 40,538 | 94 | |
| Jose Abad Santos (Trinidad) | Urban | 5,167 | | | 963 | 963 | | | | | | 963 | 963 | 19 | |
| | Rural | 43,642 | | | 8,795 | 8,795 | | | | | | 8,795 | 8,795 | 20 | |
| | Total | 48,809 | | | 9,758 | 9,758 | | | | | | 9,758 | 9,758 | 20 | |
| Kiblawan | Urban | 5,925 | 2,049 | | 290 | 2,339 | | | | 2,049 | | 290 | 2,339 | 39 | |
| | Rural | 32,006 | | 2,423 | 10,681 | 13,104 | | | | | 2,423 | 10,681 | 13,104 | 41 | |
| | Total | 37,931 | 2,049 | 2,423 | 10,971 | 15,443 | | | | 2,049 | 2,423 | 10,971 | 15,443 | 41 | |
| Magsaysay | Urban | 6,737 | 1,578 | | 3,355 | 4,933 | | | | 1,578 | | 3,355 | 4,933 | 73 | |
| | Rural | 36,393 | 967 | 3,376 | 21,500 | 25,845 | | | | 967 | 3,376 | 21,500 | 25,845 | 71 | |
| | Total | 43,130 | 2,545 | 3,376 | 24,857 | 30,778 | | | | 2,545 | 3,376 | 24,857 | 30,778 | 71 | |
| Misalag | Urban | 4,599 | 918 | | 1,735 | 2,653 | | | | 918 | | 1,735 | 2,653 | 58 | |
| | Rural | 27,124 | 1,150 | 353 | 14,190 | 15,693 | | | | 1,150 | 353 | 14,190 | 15,693 | 58 | |
| | Total | 31,723 | 2,068 | 353 | 15,925 | 18,346 | | | | 2,068 | 353 | 15,925 | 18,346 | 58 | |
| Milita | Urban | 12,897 | 5,623 | | 150 | 5,773 | | | | 5,623 | | 150 | 5,773 | 45 | |
| | Rural | 72,123 | 2,342 | 3,536 | 20,000 | 25,884 | | | | 2,342 | 3,536 | 20,000 | 25,884 | 36 | |
| | Total | 85,020 | 7,965 | 3,536 | 20,156 | 31,657 | | | | 7,965 | 3,536 | 20,156 | 31,657 | 37 | |
| Mintao | Urban | 4,010 | 2,141 | | 451 | 2,592 | | | | 2,141 | | 451 | 2,592 | 65 | |
| | Rural | 40,615 | 94 | 2,781 | 24,523 | 27,398 | | | | 94 | 2,781 | 24,523 | 27,398 | 67 | |
| | Total | 44,625 | 2,235 | 2,781 | 24,974 | 29,990 | | | | 2,235 | 2,781 | 24,974 | 29,990 | 67 | |
| Padada | Urban | 9,297 | 6,492 | | 1,860 | 8,352 | | | | 6,492 | | 1,860 | 8,352 | 90 | |
| | Rural | 13,704 | 1,570 | 1,025 | 4,202 | 6,797 | | | | 1,570 | 1,025 | 4,202 | 6,797 | 50 | |
| | Total | 23,001 | 8,062 | 1,025 | 6,062 | 15,149 | | | | 8,062 | 1,025 | 6,062 | 15,149 | 66 | |
| Santa Cruz | Urban | 20,787 | 8,475 | | 5,568 | 14,043 | | | | 8,475 | | 5,568 | 14,043 | 68 | |
| | Rural | 40,326 | 1,026 | 4,065 | 16,630 | 21,721 | | | | 1,026 | 4,065 | 16,630 | 21,721 | 54 | |
| | Total | 61,113 | 9,501 | 4,065 | 22,198 | 35,764 | | | | 9,501 | 4,065 | 22,198 | 35,764 | 59 | |
| Santa Maria | Urban | 6,738 | 1,883 | | 1,554 | 3,437 | | | | 1,883 | | 1,554 | 3,437 | 51 | |
| | Rural | 36,264 | | 938 | 14,111 | 15,049 | | | | | 938 | 14,111 | 15,049 | 41 | |
| | Total | 43,002 | 1,883 | 938 | 15,665 | 18,486 | | | | 1,883 | 938 | 15,665 | 18,486 | 43 | |
| Sarangani | Urban | 2,746 | | 1,300 | | 1,300 | | | | | 1,300 | | 1,300 | 47 | |
| | Rural | 14,447 | | | 4,213 | 4,213 | | | | | | 4,213 | 4,213 | 29 | |
| | Total | 17,193 | | 1,300 | 4,213 | 5,513 | | | | | 1,300 | 4,213 | 5,513 | 32 | |
| Subp | Urban | 5,792 | 900 | | 2,289 | 3,189 | | | | | 900 | 2,289 | 3,189 | 55 | |
| | Rural | 20,565 | 1,000 | | 10,856 | 11,856 | | | | 1,000 | | 10,856 | 11,856 | 58 | |
| | Total | 26,357 | 1,900 | | 13,145 | 15,045 | | | | 1,900 | | 13,145 | 15,045 | 57 | |
| PWSP Study Area | Urban | 151,210 | 70,043 | 3,906 | 31,146 | 105,095 | | | | 70,043 | 3,906 | 31,146 | 105,095 | 70 | |
| | Rural | 545,385 | 19,397 | 25,760 | 246,632 | 291,789 | | | | 19,397 | 25,760 | 246,632 | 291,789 | 54 | |
| | Total | 696,595 | 89,440 | 29,666 | 277,778 | 396,884 | | | | 89,440 | 29,666 | 277,778 | 396,884 | 57 | |

Table 8.2.2 Population Coverage in Phase I Provided by Served Population
in the Base Year (Water Supply)

| Name of Municipality | Area | Population Served by 1997 Facilities | | | | 1997 | | 2003 | |
|-----------------------------|-------|--------------------------------------|----------|---------|---------|------------------|--------------|------------------|--------------|
| | | Level III | Level II | Level I | Total | Total Population | Coverage (%) | Total Population | Coverage (%) |
| Bansalan | Urban | 6,247 | | | 6,247 | 6,697 | 93 | 7,039 | 89 |
| | Rural | 7,513 | 2,965 | 15,184 | 25,662 | 42,918 | 60 | 45,110 | 57 |
| | Total | 13,760 | 2,965 | 15,184 | 31,909 | 49,615 | 64 | 52,149 | 61 |
| Digos (Capital) | Urban | 30,498 | | 6,778 | 37,276 | 41,886 | 89 | 46,518 | 80 |
| | Rural | 3,735 | 2,830 | 47,067 | 53,632 | 68,436 | 78 | 76,002 | 71 |
| | Total | 34,233 | 2,830 | 53,845 | 90,908 | 110,322 | 82 | 122,520 | 74 |
| Don Marcelino | Urban | | 934 | 4,469 | 5,403 | 11,181 | 48 | 12,845 | 42 |
| | Rural | | 1,318 | 879 | 2,197 | 20,227 | 11 | 23,235 | 9 |
| | Total | | 2,252 | 5,348 | 7,600 | 31,408 | 24 | 36,080 | 21 |
| Hagonoy | Urban | 3,239 | 1,672 | 1,684 | 6,595 | 6,751 | 98 | 7,556 | 87 |
| | Rural | | 150 | 33,793 | 33,943 | 36,595 | 93 | 40,959 | 83 |
| | Total | 3,239 | 1,822 | 35,477 | 40,538 | 43,346 | 94 | 48,515 | 84 |
| Jose Abad Santos (Trinidad) | Urban | | | 963 | 963 | 5,167 | 19 | 5,515 | 17 |
| | Rural | | | 8,795 | 8,795 | 43,642 | 20 | 46,578 | 19 |
| | Total | | | 9,758 | 9,758 | 48,809 | 20 | 52,093 | 19 |
| Kiblawan | Urban | 2,049 | | 290 | 2,339 | 5,925 | 39 | 6,712 | 35 |
| | Rural | | 2,423 | 10,681 | 13,104 | 32,006 | 41 | 36,262 | 36 |
| | Total | 2,049 | 2,423 | 10,971 | 15,443 | 37,931 | 41 | 42,974 | 36 |
| Magsaysay | Urban | 1,578 | | 3,355 | 4,933 | 6,737 | 73 | 7,327 | 67 |
| | Rural | 967 | 3,376 | 21,502 | 25,845 | 36,393 | 71 | 39,579 | 65 |
| | Total | 2,545 | 3,376 | 24,857 | 30,778 | 43,130 | 71 | 46,906 | 66 |
| Malalag | Urban | 918 | | 1,735 | 2,653 | 4,599 | 58 | 5,066 | 52 |
| | Rural | 1,150 | 353 | 14,190 | 15,693 | 27,124 | 58 | 29,881 | 53 |
| | Total | 2,068 | 353 | 15,925 | 18,346 | 31,723 | 58 | 34,947 | 52 |
| Malita | Urban | 5,623 | | 150 | 5,773 | 12,897 | 45 | 13,702 | 42 |
| | Rural | 2,342 | 3,536 | 20,006 | 25,884 | 72,123 | 36 | 76,627 | 34 |
| | Total | 7,965 | 3,536 | 20,156 | 31,657 | 85,020 | 37 | 90,329 | 35 |
| Matanao | Urban | 2,141 | | 451 | 2,592 | 4,010 | 65 | 4,356 | 60 |
| | Rural | 94 | 2,781 | 24,523 | 27,398 | 40,615 | 67 | 44,113 | 62 |
| | Total | 2,235 | 2,781 | 24,974 | 29,990 | 44,625 | 67 | 48,469 | 62 |
| Padada | Urban | 6,492 | | 1,860 | 8,352 | 9,297 | 90 | 10,116 | 83 |
| | Rural | 1,570 | 1,025 | 4,202 | 6,797 | 13,704 | 50 | 14,909 | 46 |
| | Total | 8,062 | 1,025 | 6,062 | 15,149 | 23,001 | 66 | 25,025 | 61 |
| Santa Cruz | Urban | 8,475 | | 5,568 | 14,043 | 20,787 | 68 | 22,971 | 61 |
| | Rural | 1,026 | 4,065 | 16,630 | 21,721 | 40,326 | 54 | 44,560 | 49 |
| | Total | 9,501 | 4,065 | 22,198 | 35,764 | 61,113 | 59 | 67,531 | 53 |
| Santa Maria | Urban | 1,883 | | 1,554 | 3,437 | 6,738 | 51 | 7,297 | 47 |
| | Rural | | 938 | 14,111 | 15,049 | 36,264 | 41 | 39,272 | 38 |
| | Total | 1,883 | 938 | 15,665 | 18,486 | 43,002 | 43 | 46,569 | 40 |
| Sarangani | Urban | | 1,300 | | 1,300 | 2,746 | 47 | 3,029 | 43 |
| | Rural | | | 4,213 | 4,213 | 14,447 | 29 | 15,936 | 26 |
| | Total | | 1,300 | 4,213 | 5,513 | 17,193 | 32 | 18,965 | 29 |
| Sulop | Urban | 900 | | 2,289 | 3,189 | 5,792 | 55 | 6,092 | 52 |
| | Rural | 1,000 | | 10,856 | 11,856 | 20,565 | 58 | 21,630 | 55 |
| | Total | 1,900 | | 13,145 | 15,045 | 26,357 | 57 | 27,722 | 54 |
| PW4SP Study Area | Urban | 70,043 | 3,906 | 31,146 | 105,095 | 151,210 | 70 | 166,141 | 63 |
| | Rural | 19,397 | 25,760 | 246,632 | 291,789 | 545,385 | 54 | 594,653 | 49 |
| | Total | 89,440 | 29,666 | 277,778 | 396,884 | 696,595 | 57 | 760,794 | 52 |

Table 8.2.3 Number of Households Served by Sanitary Toilets in the Base Year (1997)

| Name of Municipality | Area | Population (1997) | Number of Households (1997) | Households Using Sanitary Toilets in 1997 | | | | Recipient HHs of Planned/On-going Projects | | | | Households Using Sanitary Toilets in the Base Year (1997) | | | | | |
|-----------------------------|-------|-------------------|-----------------------------|---|------------|---------|---------|--|------------|---------|---------|---|------------|---------|-------|--------------|------------|
| | | | | Flush Toilets | Four Flush | VIP/Dry | Total | Flush | Four Flush | VIP/Dry | Total | Flush | Four Flush | VIP/Dry | Total | Coverage (%) | |
| | | | | | | | | | | | | | | | | Flush | Four Flush |
| Bansalan | Urban | 6,697 | 3,195 | 32 | 861 | 103 | 996 | 32 | 861 | 103 | 996 | 2 | 71 | 7 | 71 | | |
| | Rural | 42,918 | 8,705 | 82 | 6,716 | 973 | 2,721 | 82 | 6,716 | 973 | 2,721 | 1 | 77 | 11 | 89 | | |
| | Total | 49,615 | 10,900 | 114 | 7,577 | 1,076 | 3,717 | 114 | 7,577 | 1,076 | 3,717 | 1 | 75 | 11 | 87 | | |
| Digos (Capital) | Urban | 41,886 | 8,513 | 2,278 | 4,813 | 197 | 2,288 | 2,278 | 4,813 | 197 | 2,288 | 27 | 52 | 2 | 86 | | |
| | Rural | 68,436 | 13,657 | 397 | 11,685 | 1,361 | 13,443 | 397 | 11,685 | 1,361 | 13,443 | 3 | 85 | 10 | 94 | | |
| | Total | 110,322 | 22,170 | 3,675 | 16,498 | 1,558 | 20,731 | 3,675 | 16,498 | 1,558 | 20,731 | 32 | 74 | 7 | 93 | | |
| Don Marcelino | Urban | 11,181 | 2,154 | 42 | 767 | 29 | 838 | 42 | 767 | 29 | 838 | 2 | 39 | 1 | 39 | | |
| | Rural | 20,227 | 3,838 | 13 | 1,972 | 950 | 2,935 | 13 | 1,972 | 950 | 2,935 | 1 | 51 | 25 | 76 | | |
| | Total | 31,408 | 5,992 | 55 | 2,739 | 979 | 3,773 | 55 | 2,739 | 979 | 3,773 | 1 | 46 | 16 | 63 | | |
| Haguenay | Urban | 6,751 | 1,558 | 38 | 602 | 166 | 806 | 38 | 602 | 166 | 806 | 3 | 44 | 12 | 59 | | |
| | Rural | 36,595 | 7,044 | 38 | 5,091 | 1,040 | 6,169 | 38 | 5,091 | 1,040 | 6,169 | 1 | 70 | 14 | 84 | | |
| | Total | 43,346 | 8,602 | 76 | 5,693 | 2,006 | 6,975 | 76 | 5,693 | 2,006 | 6,975 | 1 | 66 | 14 | 81 | | |
| Jose Abad Santos (Trinidad) | Urban | 5,167 | 992 | 24 | 471 | 195 | 694 | 24 | 471 | 195 | 694 | 3 | 47 | 20 | 70 | | |
| | Rural | 43,642 | 8,474 | 34 | 4,698 | 1,129 | 5,861 | 34 | 4,698 | 1,129 | 5,861 | 1 | 55 | 13 | 69 | | |
| | Total | 48,809 | 9,466 | 62 | 5,169 | 1,324 | 6,555 | 62 | 5,169 | 1,324 | 6,555 | 1 | 55 | 14 | 69 | | |
| Kiblawan | Urban | 5,925 | 1,232 | 42 | 553 | 186 | 781 | 42 | 553 | 186 | 781 | 3 | 45 | 15 | 63 | | |
| | Rural | 32,096 | 6,153 | 33 | 3,988 | 1,130 | 5,151 | 33 | 3,988 | 1,130 | 5,151 | 1 | 65 | 18 | 84 | | |
| | Total | 37,981 | 7,385 | 75 | 4,541 | 1,316 | 5,932 | 75 | 4,541 | 1,316 | 5,932 | 1 | 61 | 18 | 80 | | |
| Magsaysay | Urban | 6,737 | 1,298 | 26 | 604 | 128 | 758 | 26 | 604 | 128 | 758 | 2 | 47 | 10 | 58 | | |
| | Rural | 36,390 | 7,150 | 31 | 4,424 | 1,208 | 5,663 | 31 | 4,424 | 1,208 | 5,663 | 1 | 60 | 16 | 76 | | |
| | Total | 43,127 | 8,448 | 57 | 5,028 | 1,336 | 6,421 | 57 | 5,028 | 1,336 | 6,421 | 1 | 60 | 16 | 76 | | |
| Malabag | Urban | 4,599 | 948 | 30 | 658 | 145 | 833 | 30 | 658 | 145 | 833 | 3 | 69 | 15 | 85 | | |
| | Rural | 27,124 | 5,508 | 42 | 4,282 | 850 | 5,174 | 42 | 4,282 | 850 | 5,174 | 1 | 81 | 16 | 97 | | |
| | Total | 31,723 | 6,456 | 72 | 4,940 | 995 | 6,007 | 72 | 4,940 | 995 | 6,007 | 1 | 76 | 16 | 96 | | |
| Malita | Urban | 12,897 | 2,499 | 110 | 1,404 | 202 | 1,716 | 110 | 1,404 | 202 | 1,716 | 4 | 56 | 8 | 69 | | |
| | Rural | 72,123 | 14,310 | 278 | 10,411 | 1,525 | 12,214 | 278 | 10,411 | 1,525 | 12,214 | 2 | 73 | 11 | 85 | | |
| | Total | 85,020 | 16,809 | 388 | 11,815 | 1,727 | 13,930 | 388 | 11,815 | 1,727 | 13,930 | 2 | 70 | 10 | 83 | | |
| Madanao | Urban | 4,016 | 804 | 174 | 267 | 171 | 592 | 174 | 267 | 171 | 592 | 22 | 31 | 21 | 74 | | |
| | Rural | 40,615 | 7,826 | 48 | 4,867 | 1,150 | 6,065 | 48 | 4,867 | 1,150 | 6,065 | 1 | 62 | 15 | 77 | | |
| | Total | 44,631 | 8,630 | 222 | 5,114 | 1,321 | 6,657 | 222 | 5,114 | 1,321 | 6,657 | 3 | 59 | 15 | 77 | | |
| Padada | Urban | 9,297 | 1,810 | 120 | 542 | 64 | 746 | 120 | 542 | 64 | 746 | 7 | 30 | 5 | 41 | | |
| | Rural | 13,704 | 2,814 | 45 | 2,545 | 90 | 2,680 | 45 | 2,545 | 90 | 2,680 | 2 | 80 | 3 | 95 | | |
| | Total | 23,001 | 4,624 | 165 | 3,087 | 174 | 3,426 | 165 | 3,087 | 174 | 3,426 | 4 | 67 | 4 | 74 | | |
| Santa Cruz | Urban | 20,797 | 4,076 | 229 | 1,553 | 356 | 2,129 | 229 | 1,553 | 356 | 2,129 | 5 | 38 | 9 | 52 | | |
| | Rural | 40,326 | 8,001 | 73 | 5,643 | 1,241 | 7,057 | 73 | 5,643 | 1,241 | 7,057 | 1 | 71 | 17 | 88 | | |
| | Total | 61,123 | 12,077 | 293 | 7,196 | 1,697 | 9,186 | 293 | 7,196 | 1,697 | 9,186 | 2 | 60 | 14 | 76 | | |
| Santa Maria | Urban | 6,738 | 1,306 | 40 | 738 | 91 | 869 | 40 | 738 | 91 | 869 | 3 | 57 | 7 | 67 | | |
| | Rural | 36,264 | 6,860 | 37 | 4,693 | 1,116 | 5,846 | 37 | 4,693 | 1,116 | 5,846 | 1 | 67 | 16 | 84 | | |
| | Total | 43,002 | 8,266 | 77 | 5,431 | 1,207 | 6,715 | 77 | 5,431 | 1,207 | 6,715 | 1 | 66 | 15 | 81 | | |
| Sarangani | Urban | 2,746 | 519 | 16 | 256 | 153 | 425 | 16 | 256 | 153 | 425 | 3 | 49 | 29 | 82 | | |
| | Rural | 14,447 | 2,690 | 12 | 2,866 | 525 | 3,223 | 12 | 2,866 | 525 | 3,223 | 1 | 32 | 20 | 49 | | |
| | Total | 17,193 | 3,209 | 28 | 3,042 | 678 | 3,648 | 28 | 3,042 | 678 | 3,648 | 10 | 42 | 10 | 62 | | |
| Sulop | Urban | 5,792 | 1,177 | 116 | 499 | 112 | 727 | 116 | 499 | 112 | 727 | 10 | 42 | 10 | 62 | | |
| | Rural | 20,365 | 4,155 | 22 | 1,543 | 1,076 | 2,591 | 22 | 1,543 | 1,076 | 2,591 | 1 | 37 | 25 | 62 | | |
| | Total | 26,157 | 5,332 | 138 | 2,042 | 1,318 | 3,318 | 138 | 2,042 | 1,318 | 3,318 | 3 | 38 | 21 | 62 | | |
| Provincial Total | Urban | 151,210 | 30,090 | 3,312 | 14,568 | 2,318 | 20,198 | 3,312 | 14,568 | 2,318 | 20,198 | 11 | 48 | 8 | 67 | | |
| | Rural | 545,383 | 107,377 | 1,185 | 73,346 | 15,414 | 89,943 | 1,185 | 73,346 | 15,414 | 89,943 | 1 | 65 | 14 | 84 | | |
| | Total | 696,593 | 137,467 | 4,497 | 87,912 | 17,732 | 110,141 | 4,497 | 87,912 | 17,732 | 110,141 | 3 | 68 | 13 | 80 | | |

Table 8.2.4 Number of Public School Student Served by School Toilets in Base Year (1997)

| Name of Municipality | 1997 Total Number of Public School Student | Standard No. of Student that can be Served by 1997 | No. of Student to be Served by Planned /On-going Projects | Standard No. of Students that can be Served by Toilets in Base Year (1997) | Coverage (%) |
|-----------------------------|--|--|---|--|--------------|
| Bansajan | 10,287 | 3,600 | 0 | 3,600 | 35 |
| Digos (Capital) | 26,738 | 6,240 | 0 | 6,240 | 23 |
| Don Marcelino | 5,561 | 2,640 | 0 | 2,640 | 47 |
| Hagonoy | 9,066 | 3,360 | 0 | 3,360 | 37 |
| Jose Abad Santos (Trinidad) | 6,339 | 2,880 | 0 | 2,880 | 45 |
| Kiblawan | 6,650 | 2,400 | 0 | 2,400 | 36 |
| Magsaysay | 9,749 | 3,360 | 0 | 3,360 | 34 |
| Malalag | 6,766 | 2,640 | 0 | 2,640 | 39 |
| Malita | 16,878 | 9,120 | 0 | 9,120 | 54 |
| Matanao | 10,270 | 4,320 | 0 | 4,320 | 42 |
| Padada | 4,236 | 1,920 | 0 | 1,920 | 45 |
| Santa Cruz | 15,498 | 6,240 | 0 | 6,240 | 40 |
| Santa Maria | 9,744 | 5,280 | 0 | 5,280 | 54 |
| Sarangani | 7,290 | 3,120 | 0 | 3,120 | 43 |
| Sulop | 6,515 | 2,640 | 0 | 2,640 | 41 |
| PW4SP Study Area | 151,587 | 59,760 | 0 | 59,760 | 39 |

Table 8.2.5 Number of Public Utilities with Sanitary Toilets in the Base Year (1997)

| Name of Municipality | Type | No. of PU with Toilets in 1997 | No. of PU with Sanitary Toilets in 1997 | No. of PU with Toilets in Planned/Ongoing Project | No. of PU with Sanitary Toilets in Planned/Ongoing Projects | No. of PU with Toilets in Base Year 1997 | No. of PU with Sanitary Toilets in Base year 1997 | Coverage (%) |
|-----------------------------|----------------------|--------------------------------|---|---|---|--|---|--------------|
| Bansalan | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | 1 | 1 | | | 1 | 1 | 100 |
| | Total | 2 | 2 | | | 2 | 2 | 100 |
| Oigos (Capital) | Public Market | 2 | 2 | | | 2 | 2 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 2 | 2 | | | 2 | 2 | 100 |
| Don Marcelino | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Iliganoy | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Jose Abad Santos (Trinidad) | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Kiblawan | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Magsaysay | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Malalag | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Malita | Public Market | 3 | 1 | | | 3 | 1 | 33 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 3 | 1 | | | 3 | 1 | 33 |
| Matanao | Public Market | 5 | 1 | | | 5 | 1 | 20 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 5 | 1 | | | 5 | 1 | 20 |
| Padada | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Santa Cruz | Public Market | 2 | 1 | | | 2 | 1 | 50 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 2 | 1 | | | 2 | 1 | 50 |
| Santa Maria | Public Market | 2 | 1 | | | 2 | 1 | 50 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 2 | 1 | | | 2 | 1 | 50 |
| Sarangani | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | | | | | | | |
| | Total | 1 | 1 | | | 1 | 1 | 100 |
| Sulop | Public Market | 1 | 1 | | | 1 | 1 | 100 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | 1 | 1 | | | 1 | 1 | 100 |
| | Total | 2 | 2 | | | 2 | 2 | 100 |
| PW4SP Study Area | Public Market | 24 | 16 | | | 24 | 16 | 67 |
| | Bus/Jeepney Terminal | | | | | | | |
| | Parks/Playground | 2 | 2 | | | 2 | 2 | 100 |
| | Total | 26 | 18 | | | 26 | 18 | 69 |

Table 8.2.7 Public School Students and Public Utilities Coverage in Phase I by Existing Facilities in the Base Year

| Name of Municipalities | Public School Toilets | | | | | | Public Toilets | | | | | |
|-----------------------------|---|-------------------------------------|----|------------------------------------|----|-------------------------------------|--|-----|------------------------|--|--------|--|
| | Std. No. of Student that can be Served by Base Year | Coverage in 1997 | | Coverage in 2003 | | No. of PU with Toilets in Base Year | No. of PU with Sanitary Toilets in Base Year | % | No. of PU with Toilets | No. of PU with Sanitary Toilets in Base Year | % | |
| | | Total No. of Public School Students | % | Total No. of Public School Student | % | | | | | | | |
| Bansalan | 3,600 | 10,287 | 35 | 11,473 | 31 | 2 | 2 | 100 | 3 | 2 | 66.667 | |
| Digos (Capital) | 6,240 | 26,738 | 23 | 31,379 | 20 | 2 | 2 | 100 | 4 | 2 | 50 | |
| Don Marcelino | 2,640 | 5,561 | 47 | 6,875 | 38 | 1 | 1 | 100 | 2 | 1 | 50 | |
| Hagonoy | 3,360 | 9,066 | 37 | 10,826 | 31 | 1 | 1 | 100 | 2 | 1 | 50 | |
| Jose Abad Santos (Trinidad) | 2,880 | 6,339 | 45 | 7,550 | 38 | 1 | 1 | 100 | 1 | 1 | 100 | |
| Kiblawan | 2,400 | 6,650 | 36 | 8,196 | 29 | 1 | 1 | 100 | 2 | 1 | 50 | |
| Magsaysay | 3,360 | 9,749 | 34 | 11,207 | 30 | 1 | 1 | 100 | 2 | 1 | 50 | |
| Malalag | 2,640 | 6,766 | 39 | 7,910 | 33 | 1 | 1 | 100 | 2 | 1 | 50 | |
| Malita | 9,120 | 16,878 | 54 | 19,375 | 47 | 3 | 3 | 33 | 4 | 1 | 25 | |
| Matanao | 4,320 | 10,270 | 42 | 11,817 | 37 | 5 | 5 | 20 | 6 | 1 | 17 | |
| Padada | 1,920 | 4,236 | 45 | 4,956 | 39 | 1 | 1 | 100 | 2 | 1 | 50 | |
| Santa Cruz | 6,240 | 15,498 | 40 | 18,024 | 35 | 2 | 2 | 50 | 3 | 1 | 33 | |
| Santa Maria | 5,280 | 9,744 | 54 | 11,274 | 47 | 2 | 2 | 50 | 3 | 1 | 33 | |
| Sarangani | 3,120 | 7,290 | 43 | 7,919 | 39 | 1 | 1 | 100 | 1 | 1 | 100 | |
| Sulop | 2,640 | 6,515 | 41 | 5,247 | 50 | 2 | 2 | 100 | 3 | 2 | 67 | |
| PW4SP Study Area | 59,760 | 151,387 | 39 | 174,028 | 34 | 26 | 18 | 69 | 40 | 18 | 45 | |

8.3 Projection of Frame Values

8.3.1 Review of Past Population Development and Population Projection

(1) Review of past population development

1) Characteristics of past population development

Major statistical data of past population development are shown in Table 8.3.1 in which urban and rural population are adjusted by PPDO to reflect present conditions.

Table 8.3.1 Past Population Development

| Area | Description | Total | | | Urban | | | Rural | | |
|---------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | 1980 | 1990 | 1995 | 1980 | 1990 | 1995 | 1980 | 1990 | 1995 |
| Region-XI | Population | 3,346,803 | 4,458,829 | 5,052,730 | 1,133,333 | 2,108,693 | 1,782,376 | 2,213,463 | 2,350,136 | 3,270,354 |
| | Growth Rate | 2.91% | | 2.53% | 6.41% | | -3.31% | 0.60% | | 6.83% |
| Davao del Sur | Population | 1,133,599 | 1,482,745 | 1,683,909 | 509,429 | 774,131 | 812,957 | 624,170 | 703,614 | 870,952 |
| | Growth Rate | 2.72% | | 2.58% | 5.20% | | 0.98% | 1.35% | | 4.21% |
| | Percentage 1/ | 33.9% | 33.3% | 33.3% | 44.9% | 36.7% | 45.6% | 28.2% | 30.2% | 26.6% |

Note: 1/ Provincial population percentage to regional population

During the census year from 1980 to 1990 and from 1990 to 1995 which was the latest census year, the following population development was observed:

- The province (including Davao City) recorded a 2.72% average annual growth rate (1980-1990) which was slightly lower than that of the region at 2.91%, while the growth rate of 2.58% (1990-1995) showed almost the same as the region's rate of 2.53%.
- Percentage of provincial population to the regional population was almost unchanged between 1980 and 1995.

2) 1995 population distribution in urban and rural areas

The 1995 population census results conducted by NSO were reviewed in terms of population distribution to urban and rural areas. The population by municipality was confirmed as shown in Table 8.3.2.

Table 8.3.2 Population Distribution in Urban and Rural Areas

| Municipality | Total Population | 1995 Census Data | | Adjusted Population | |
|-----------------------------|------------------|------------------|----------------|---------------------|----------------|
| | | Urban | Rural | Urban | Rural |
| Bansalan | 48,894 | 6,600 | 42,294 | 6,600 | 42,294 |
| Digos (Capital) | 106,565 | 40,460 | 66,105 | 40,460 | 66,105 |
| Don Marcelino | 29,968 | 2,170 | 27,798 | 2,170 | 27,798 |
| Hagonoy | 41,752 | 14,864 | 26,888 | 14,864 | 26,888 |
| Jose Abad Santos (Trinidad) | 47,833 | 7,450 | 40,383 | 7,450 | 40,383 |
| Kiblawan | 36,375 | 3,851 | 32,524 | 3,851 | 32,524 |
| Magsaysay | 41,979 | 6,557 | 35,422 | 6,557 | 35,422 |
| Malalag | 30,733 | 4,455 | 26,278 | 4,455 | 26,278 |
| Malita | 83,457 | 12,660 | 70,797 | 12,660 | 70,797 |
| Matanao | 43,455 | 3,905 | 39,550 | 3,905 | 39,550 |
| Padada | 22,384 | 9,048 | 13,336 | 9,048 | 13,336 |
| Santa Cruz | 59,139 | 20,116 | 39,023 | 20,116 | 39,023 |
| Santa Maria | 41,919 | 6,568 | 35,351 | 6,568 | 35,351 |
| Sarangani | 16,648 | 2,659 | 13,989 | 2,659 | 13,989 |
| Sulop | 25,968 | 5,707 | 20,261 | 5,707 | 20,261 |
| PW4SP Area | 677,069 | 147,070 | 529,999 | 147,070 | 529,999 |
| Davao City | 1,006,840 | 665,887 | 340,953 | 665,887 | 340,953 |
| Province | 1,683,909 | 812,957 | 870,952 | 812,957 | 870,952 |

(2) Manner of population projection

The latest population study, the National and Regional Population Projections was issued by NSO based on the 1995 census results including the growth rates and demographic conditions of the respective regions. However, at this time of PW4SP preparation, the provincial/municipal population has not yet been published by. It appears that there is already a long delay since the conduct of the 1995 Population Census. Meanwhile, the NSO's possible method to be applied for provincial and municipal population projection was confirmed.

As a local based projection, the Study on the Davao Integrated Development Program (DIDP) Master Planning is currently implemented under the technical cooperation of JICA, however, the population projection has not yet been completed. In this respect, the possible method of NSO was adopted for this PW4SP. The regional population projected by the NSO was employed for this planning. The following are the manner of projection with conditions/assumptions employed for provincial and municipal population in the future.

- 1) Population projections for the provinces are first generated based on population projections for the Region XI taken from a published volume on regional population projection for the years 1995 to 2020. The regional population is projected based on the 1995 Census of Population
- 2) The ratio method is used for the projection of both provincial and municipal population.
 - For the provincial level projections, ratios (R) of the population of the concerned provinces to the population of the region are projected. These ratios are multiplied to the projected population of the region for each projection year.
 - Similarly, for the municipal population projections, ratios of the population of the municipalities of each concerned province to the population of the province are projected. These ratios are multiplied to the projected population of the province for each projection year.
 - The basic assumption adopted is that for each concerned province, and for each of the municipality in the province, the rate (r) at which the ratios change will gradually decline so that they will all become zero after 50 years from 1995. This implies that stability of the ratios will be attained after 50 years from 1995.
 - Based on this assumption, a schedule of ratios of the provinces in the same region, and of the municipalities in the same province is derived for each projection year using the formula:

$$R(k) = R(0) \prod_{1}^k (1 + r - kr/50)$$

where; R(k) = ratio in kth year from 1995 of the population of the province to that of the region or of the population of the municipality to that of the province

R(0) = ratio in 1995 of the population of the province to that of the region or of the population of the municipality to that of the province

r = initial rate of change of the ratio

k = "k"th year from 1995

- The initial rate of change is derived based on the levels and trends of the ratios observed in the 1970, 1980 and 1995 censuses.

- A geometric formula for calculating the rate at which the ratio changes is adopted, that is, r is equal to $(\ln(P_2/P_1))/n$, where P_2 is the ratio in Year₂, P_1 , in Year₁, and n is the number of years between Year₁ and Year₂. Thus for instance, for the intercensal period 1970-1980, the rate of change in the ratio is equal to $\ln(P_{1980}/P_{1970})$.
- 3) In the present application(r), the concerned provinces and municipalities are classified into following four types based on the trends of their ratios as observed in the censuses of 1970, 1980, 1990 and 1995:
- Type I – provinces/municipalities that showed unidirectional trend in their ratios, that is, consistently increasing or decreasing from 1970 to 1995 (r is positive or negative for intercensal periods 1970-1980, 1980-1990 and 1990-1995);
 - Type II – provinces/municipalities that showed unidirectional trend in their ratios only from 1980 to 1995 (r is positive or negative for the last two intercensal periods only, that is, 1980-1990 and 1990-1995);
 - Type III – provinces/municipalities that showed unidirectional trend in their ratios only from 1970 to 1990 (r is positive or negative for the first two intercensal periods only, that is 1970-1980 and 1980-1990);
 - Type IV – provinces/municipalities with erratic trends.

In general, the initial rate to be used for each type of province or municipality is determined according to the following criteria.

- For type I province or municipality, the initial rate is equal to the lowest observed annual rate change in the ratio or lower to the average annual rates observed during the 1980-1990 and 1990-1995 periods, whichever produces a more demographically probable result;
- For type II province or municipality, the initial rate is equal to lower to the average annual rates observed during 1980-1990 and 1990-1995 periods;
- For type III province or municipality, the initial rate is equal to one-half of the average annual rate during the period 1990-1995; and

- For type IV province or municipality, the initial rate is equal to one-half of the average annual rate during the period 1990-1995, or it is equal to zero if the ratio in 1995 is equal to or higher than 0.20. An initial rate of zero means that the ratio observed in 1995 would remain the same throughout the projection period.

The province of Davao der Sur (including Davao City) is classified as "type I" based on the past level and trend of ratios of change, and the initial rate of change was estimated at -0.0052. While, those of the municipalities were established as shown below.

| <u>Municipality</u> | <u>Initial Ratio</u> | <u>Municipality</u> | <u>Initial Ratio</u> |
|---------------------|----------------------|---------------------|----------------------|
| Bansalan | -0.00723 | Malita | -0.00625 |
| Digos (Capital) | -0.00210 | Matanao | -0.00417 |
| Don Marcelino | 0.00098 | Padada | -0.00401 |
| Hagonoy | -0.00138 | Santa Cruz | -0.00256 |
| Jose Abad Santos | -0.00582 | Santa Maria | -0.00444 |
| Kiblawan | -0.00027 | Sarangani | -0.00272 |
| Magsaysay | -0.00404 | Sulop | -0.00722 |
| Malalag | -0.00285 | | |

(3) Present population (1997)

The present population of the province including the municipalities was estimated in application of the initial rates of change as mentioned above. This means that the trend of past population development is assumed to have been prevailing up to the present. Household size in 1997 was also assumed to be the same as that in 1995.

(4) Projection of provincial population by target year

Review of provincial population projected by target year applying the aforementioned method as shown in Table 8.3.3, revealed that the future provincial population also reflected the discounted growth rate, which was the same as the regional population projection.

- Population in 2003 results from the average annual growth rate of 2.21% (1995-1998) and 2.13% (1998-2003).
- Population in 2010 with the base year of 2003 results from the average annual growth rate of 1.83% (2003-2010).
- Present profile of municipal population distribution both in urban and rural areas is assumed to prevail through the future.

- Household size in the year 2003 is assumed to be the same as the 1995 population census results, while that in the year 2010 is assumed to be 4 persons/household for the whole province in accordance with the target of the national family planning.

Table 8.3.3 Growth Rates and Population Projection for Target Years: Region and Province

| Area | Growth Rate (%) | | | | | Population and Provincial Share in the Region | | | |
|---------------|-----------------|----------------|-------------|---------------|----------------|---|--------------------|--------------------|--------------------|
| | 1980 - 1990 | 1990 - 1995 | 1995 - 1998 | 1998 - 2003 | 2003 - 2010 | Target Year | | | |
| | | | | | | 1995 | 1997 | 2003 | 2010 |
| | | | | | | NSO Census | Planning Base Year | Medium Term | Long Term |
| Region XI | 2.91 | 2.53 (13.1) | 2.69 6.3 | 2.45 (8.9) | 2.11 (13.9) | 5,052,730 | 5,331,644 | 6,173,575 | 7,146,889 |
| Davao del Sur | 2.72 | 2.58 | 2.21 | 2.13 | 1.83 | 1,683,909 33.3% | 1,757,633 33.0% | 1,998,270 32.4% | 2,269,227 31.8% |

Note: () shows percentage of growth rate decline from the previous period.

Table 8.3.4 shows the provincial population by urban and rural area for the target years and the year 1995. Table 8.3.5 presents projected number of households for the target years.

Table 8.3.4 Provincial Population for Target Years

| Area | Population/ Composition | 1995 | 1997 | 2003 | 2010 |
|--------------|----------------------------|-----------|-----------|-----------|-----------|
| Total | Population | 1,683,909 | 1,757,633 | 1,998,270 | 2,269,227 |
| Urban | Population | 812,957 | 852,942 | 984,562 | 1,134,381 |
| Area | Composition (%) | 48 | 49 | 49 | 50 |
| Rural | Population | 870,952 | 904,691 | 1,013,708 | 1,134,846 |
| Area | Composition (%) | 52 | 51 | 51 | 50 |

Table 8.3.5 Projected Number of Households by Urban and Rural Area by Municipality by Target Year

| Name of Municipality | Household Size | | | Number of Households | | | | | | | | | | | |
|-----------------------------|----------------|-------|-------|----------------------|---------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------|
| | 1995 | | | 1997 | | | 2003 | | | 2010 | | | | | |
| | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total | | | |
| Bansalan | 4.80 | 4.93 | 4.91 | 1,375 | 8,582 | 9,957 | 1,395 | 8,705 | 10,100 | 1,466 | 9,150 | 10,616 | 1,846 | 11,829 | 13,675 |
| Digos (Capital) | 4.92 | 5.00 | 4.97 | 8,219 | 13,211 | 21,430 | 8,513 | 13,687 | 22,200 | 9,455 | 15,200 | 24,655 | 12,886 | 21,053 | 33,939 |
| Don Marcelino | 5.19 | 5.27 | 5.26 | 418 | 5,275 | 5,693 | 2,154 | 3,838 | 5,992 | 2,475 | 4,409 | 6,884 | 3,680 | 6,657 | 10,337 |
| Hagonoy | 4.97 | 5.01 | 4.99 | 2,988 | 5,371 | 8,359 | 1,358 | 7,304 | 8,662 | 1,520 | 8,175 | 9,695 | 2,109 | 11,434 | 13,543 |
| Jose Abad Santos (Trinidad) | 5.21 | 5.15 | 5.16 | 1,430 | 7,843 | 9,273 | 992 | 8,474 | 9,466 | 1,059 | 9,044 | 10,103 | 1,469 | 12,402 | 13,871 |
| Kiblawan | 4.81 | 5.20 | 5.16 | 800 | 6,254 | 7,054 | 1,232 | 6,155 | 7,387 | 1,395 | 6,975 | 8,368 | 1,897 | 10,246 | 12,143 |
| Magsaysay | 5.19 | 5.09 | 5.10 | 1,263 | 6,961 | 8,224 | 1,298 | 7,150 | 8,448 | 1,412 | 7,776 | 9,188 | 1,988 | 10,738 | 12,726 |
| Miallag | 4.85 | 5.11 | 5.07 | 918 | 5,141 | 6,059 | 948 | 5,308 | 6,256 | 1,045 | 5,848 | 6,893 | 1,392 | 8,211 | 9,603 |
| Mahita | 5.16 | 5.04 | 5.05 | 2,452 | 14,060 | 16,512 | 2,499 | 14,310 | 16,809 | 2,655 | 15,204 | 17,859 | 3,632 | 20,311 | 23,943 |
| Matanao | 4.99 | 5.19 | 5.17 | 783 | 7,626 | 8,409 | 804 | 7,826 | 8,630 | 873 | 8,500 | 9,373 | 1,180 | 11,952 | 13,132 |
| Padada | 5.11 | 4.87 | 4.97 | 1,770 | 2,736 | 4,506 | 1,819 | 2,814 | 4,633 | 1,980 | 3,061 | 5,041 | 2,745 | 4,046 | 6,791 |
| Santa Cruz | 5.10 | 5.04 | 5.06 | 3,945 | 7,749 | 11,694 | 4,076 | 8,001 | 12,077 | 4,504 | 8,841 | 13,345 | 6,331 | 12,282 | 18,615 |
| Santa Maria | 5.16 | 5.21 | 5.20 | 1,274 | 6,786 | 8,060 | 1,306 | 6,960 | 8,266 | 1,414 | 7,538 | 8,952 | 1,971 | 10,609 | 12,580 |
| Sarangani | 5.29 | 5.37 | 5.35 | 503 | 2,607 | 3,110 | 519 | 2,690 | 3,209 | 573 | 2,968 | 3,541 | 834 | 4,385 | 5,219 |
| Sulop | 4.92 | 4.95 | 4.95 | 1,159 | 4,092 | 5,251 | 1,177 | 4,155 | 5,332 | 1,238 | 4,370 | 5,608 | 1,599 | 5,676 | 7,275 |
| PW&SP Study Area | 5.02 | 5.08 | 5.07 | 29,297 | 104,294 | 133,591 | 30,090 | 107,377 | 137,467 | 33,064 | 117,057 | 150,121 | 45,559 | 161,831 | 207,390 |

8.3.2 School Enrollment Projection

Table 8.3.6 Projected School Enrollment by Municipality by Target Year

| Name of Municipality | 1997 | | | 2003 | | | 2010 | | |
|----------------------|-----------------------|---------|------------------------|-----------------------|---------|------------------------|-----------------------|---------|------------------------|
| | Total Enrollment | | Public Sch. Enrollment | Total Enrollment | | Public Sch. Enrollment | Total Enrollment | | Public Sch. Enrollment |
| | School Age Population | Number | Participation Rate | School Age Population | Number | Participation Rate | School Age Population | Number | Participation Rate |
| Bansalan | 13,312 | 12,445 | 93 | 13,992 | 13,292 | 95 | 14,677 | 13,943 | 95 |
| Digos (Capital) | 29,432 | 29,674 | 101 | 32,686 | 32,032 | 98 | 36,217 | 35,493 | 98 |
| Don Marcelino | 9,207 | 5,561 | 60 | 10,577 | 6,875 | 65 | 12,121 | 8,485 | 70 |
| Hagonoy | 11,796 | 9,582 | 81 | 13,203 | 11,355 | 86 | 14,743 | 13,269 | 90 |
| Jose Abad Santos | 15,377 | 6,560 | 43 | 16,412 | 7,878 | 48 | 17,479 | 9,613 | 55 |
| Kiblawan | 11,129 | 7,844 | 70 | 12,609 | 9,457 | 75 | 14,252 | 11,402 | 80 |
| Magsaysay | 12,124 | 10,973 | 91 | 13,185 | 12,526 | 95 | 14,308 | 13,593 | 95 |
| Malalag | 8,864 | 6,991 | 79 | 9,765 | 8,203 | 84 | 10,733 | 9,660 | 90 |
| Malita | 24,981 | 17,712 | 71 | 26,541 | 19,906 | 75 | 28,140 | 22,512 | 80 |
| Matanao | 12,363 | 11,105 | 90 | 13,428 | 12,488 | 93 | 14,553 | 13,534 | 93 |
| Padada | 6,074 | 5,189 | 85 | 6,608 | 5,947 | 90 | 7,173 | 6,456 | 90 |
| Santa Cruz | 16,991 | 16,016 | 94 | 18,775 | 17,649 | 94 | 20,699 | 19,457 | 94 |
| Santa Maria | 12,393 | 10,610 | 86 | 13,421 | 12,079 | 90 | 14,503 | 13,053 | 90 |
| Sarangani | 7,478 | 7,290 | 97 | 8,249 | 7,837 | 95 | 9,079 | 8,625 | 95 |
| Sulop | 5,090 | 6,890 | 135 | 5,354 | 5,247 | 98 | 5,620 | 5,508 | 98 |
| PWASP Study Area | 196,611 | 164,442 | 84 | 214,805 | 182,771 | 85 | 234,297 | 204,603 | 87 |

8.3.3 Projection of the Number of Public Utilities

Table 8.3.7 Projected Number of Public Utilities by Municipality by Target Year

| Name of Municipality | Type | 1997 | 2003 | | 2010 | |
|-----------------------------|----------------------|-------------------------|-----------------------|-------|-----------------------|-------|
| | | No. of Public Utilities | Proposed Construction | Total | Proposed Construction | Total |
| Bansalan | Public Market | 1 | | 1 | 1 | 2 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | 1 | | 1 | | 1 |
| | Total | 2 | 1 | 3 | 1 | 4 |
| Digos (Capital) | Public Market | 2 | | 2 | 2 | 4 |
| | Bus/Jeepney Terminal | | 2 | 2 | | 2 |
| | Parks/Playground | | | | | |
| | Total | 2 | 2 | 4 | 2 | 6 |
| Don Marcelino | Public Market | 1 | | 1 | | 1 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 1 | 1 | 2 | | 2 |
| Hagonoy | Public Market | 1 | | 1 | 1 | 2 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 1 | 1 | 2 | 1 | 3 |
| Jose Abad Santos (Trinidad) | Public Market | 1 | | 1 | | 1 |
| | Bus/Jeepney Terminal | | | | | |
| | Parks/Playground | | | | | |
| | Total | 1 | | 1 | | 1 |
| Kiblawan | Public Market | 1 | | 1 | | 1 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 1 | 1 | 2 | | 2 |
| Magsaysay | Public Market | 1 | | 1 | | 1 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 1 | 1 | 2 | | 2 |
| Malalag | Public Market | 1 | | 1 | | 1 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 1 | 1 | 2 | | 2 |
| Malita | Public Market | 3 | | 3 | 2 | 5 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 3 | 1 | 4 | 2 | 6 |
| Matanao | Public Market | 5 | | 5 | | 5 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 5 | 1 | 6 | | 6 |
| Padada | Public Market | 1 | | 1 | 1 | 2 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 1 | 1 | 2 | 1 | 3 |
| Santa Cruz | Public Market | 2 | | 2 | | 2 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 2 | 1 | 3 | | 3 |
| Santa Maria | Public Market | 2 | | 2 | | 2 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | | | | | |
| | Total | 2 | 1 | 3 | | 3 |
| Sarangani | Public Market | 1 | | 1 | 1 | 2 |
| | Bus/Jeepney Terminal | | | | | |
| | Parks/Playground | | | | | |
| | Total | 1 | | 1 | 1 | 2 |
| Sulop | Public Market | 1 | | 1 | | 1 |
| | Bus/Jeepney Terminal | | 1 | 1 | | 1 |
| | Parks/Playground | 1 | | 1 | | 1 |
| | Total | 2 | 1 | 3 | | 3 |
| PW4SP Study Area | Public Market | 24 | | 24 | 8 | 32 |
| | Bus/Jeepney Terminal | | 14 | 14 | | 14 |
| | Parks/Playground | 2 | | 2 | | 2 |
| | Total | 26 | 14 | 40 | 8 | 48 |

8.4 Types of Facilities and Implementation Criteria

8.4.1 Water Supply

(1) Urban water supply

1) Untapped spring

First priority is given to seek for utilization of untapped spring with large discharge capacity. During the course of PW4SP preparation, various untapped spring sources have been identified. Considerably large scale untapped spring sources having discharge capacity of more than 100 cu.m/day are then selected as potential water sources and rapidly evaluated as shown in Table 8.4.1.

Table 8.4.1 Rapid Evaluation of Untapped Spring for Use in Urban Water Supply

| Name of Municipality | Location (Name of Barangay) | Untapped Spring | | | | Population can be Served by Untapped Spring | Population Served by Existing Water Supply System/Facility in Base Year | | Future Urban Population | |
|----------------------|-----------------------------|-------------------------------|-------|------------------|----------------------|---|---|--------|-------------------------|--------|
| | | Discharge Capacity (cu.m/day) | | Elev. Diffr. (m) | Dist. from Mun. (km) | | Level III | Total | 2003 | 2010 |
| | | 100% | 70% | | | | | | | |
| Bansalan | Balagona | 2,170 | 1,520 | Unknown | 15.0 | 15,200 | 6,247 | 6,247 | 7,039 | 7,384 |
| | Gagpang | 870 | 600 | Unknown | 18.0 | 6,000 | | | | |
| | Sub-total | 3,040 | 2,120 | | | 21,200 | | | | |
| Don Marcelino | Agoo | 120 | 80 | Unknown | Unknown | 800 | 0 | 4,469 | 12,845 | 14,719 |
| Jose Adad Santos | Caburan Small | 160 | 110 | Unknown | 5.0 | 1,100 | 0 | 963 | 5,515 | 5,874 |
| Sta. Cruz | Ragabrab | 1,360 | 950 | Unknown | 5.0 | 9,500 | 8,745 | 14,043 | 22,971 | 25,325 |

Bansalan

Two untapped spring sources have been identified in this municipality with a total discounted discharge of about 2,120 cu.m/day or equivalent to supply for about 21,200 persons. This water source potential is more than the estimated water demand even in Phase II period. In this respect, any excess amount may be utilized to cater for neighboring municipalities under the proposed Malalag Bay Alliance Water Supply (MBAWS). However, elevation of these sources are subject to verification and their distance from poblacion (more than 15 km) is also subject for evaluation on economic feasibility.

Don Marcelino

The identified untapped spring source has a marginal discharge between Level II system and Level III system. When the future urban population is taken into account, this untapped spring can not be a major source of water supply and would rather be utilized for Level II system in barangay Agoo where it is situated. Stable/reliable discharge volume as well as elevation and distance from barangay Agoo are subject to further verification.

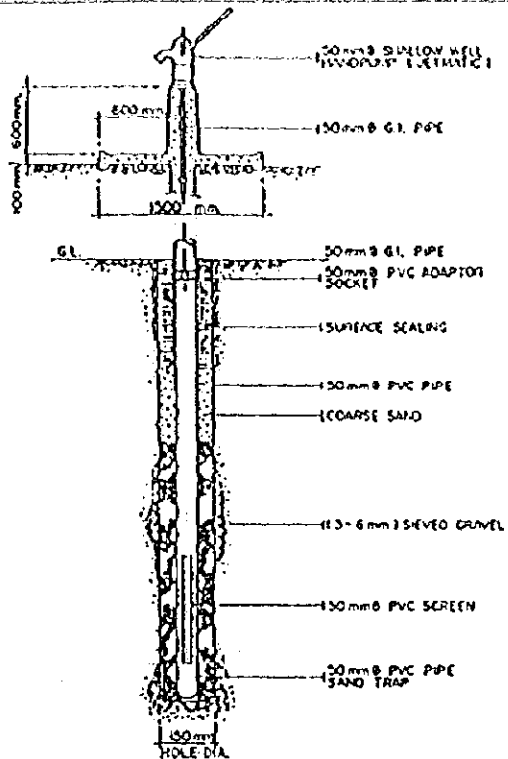
Jose Abad Santos

This untapped spring has also marginal discharge as just above the service coverage of Level II system, while future urban population of the municipality is expected to reach about 5,500 persons during the Phase I period. In this regard, this spring may be developed as a source of Level II system for barangay Caburan Small. Elevation is not known at this moment and is subject to actual confirmation for its utilization.

Santa Cruz

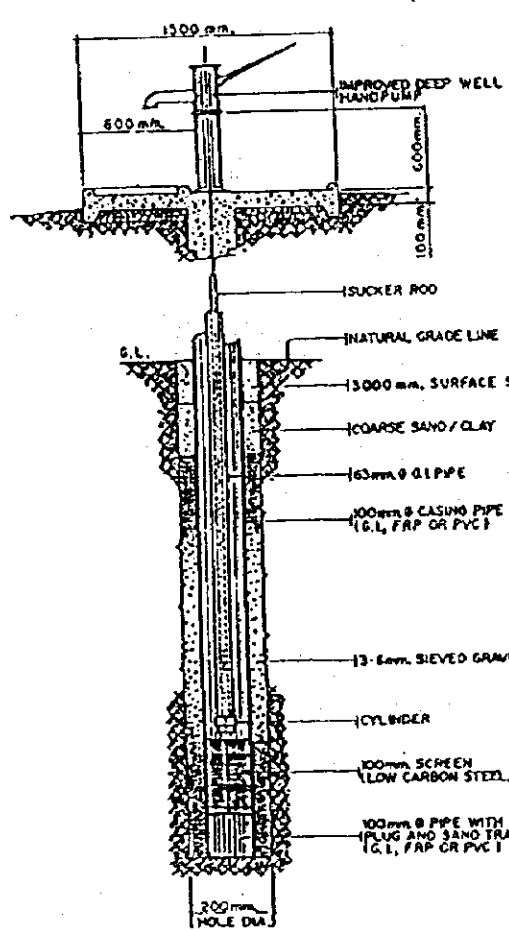
The identified untapped spring has a discounted discharge of about 950 cu.m/day or capable to serve for about 9,500 persons. The municipality of Santa Cruz has an existing Level III system which is presently serving for about 8,700 persons and another 5,300 persons are depending on Level II system and/or Level I facilities. During Phase I period, the additional 9,000 persons are to be served. In this respect, the untapped spring situated in barangay Ragabrab has enough potential to serve for these population, although its elevation from the poblacion is not yet verified.

As evaluated on the above, the municipalities of Bansalan and Santa Cruz have considerably favorable untapped spring sources for Level III system. It shall be noted, however, that confirmation of difference of elevation between untapped spring and potential service area, as well as distance and topographic conditions is prerequisite to realize this option. Discharge measurement of each spring throughout the year is also indispensable to obtain dependable/reliable discharge of the springs.

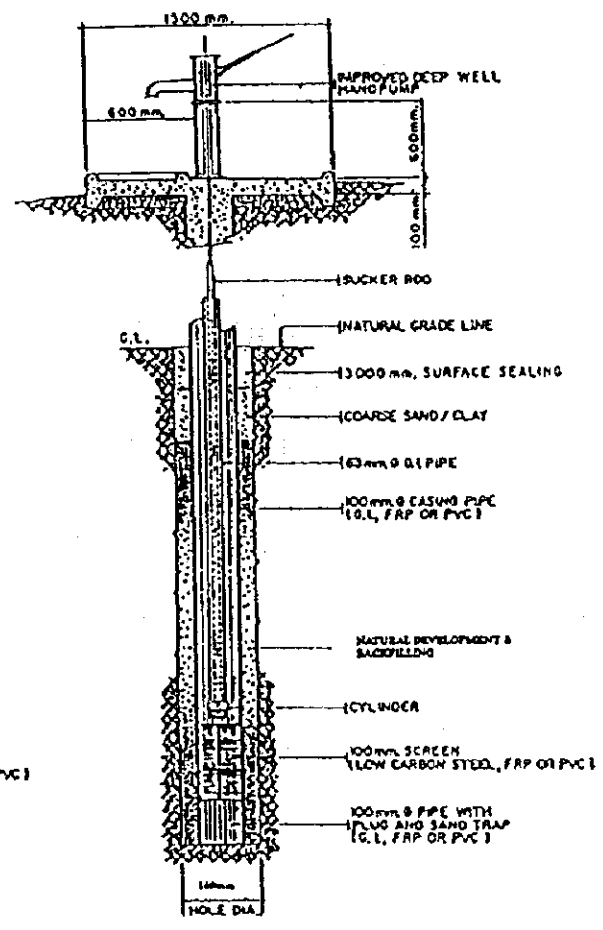


OPEN HOLE DRILLING & GRAVEL PACK METHOD

SHALLOW WELLS



OPEN HOLE DRILLING & GRAVEL PACK METHOD



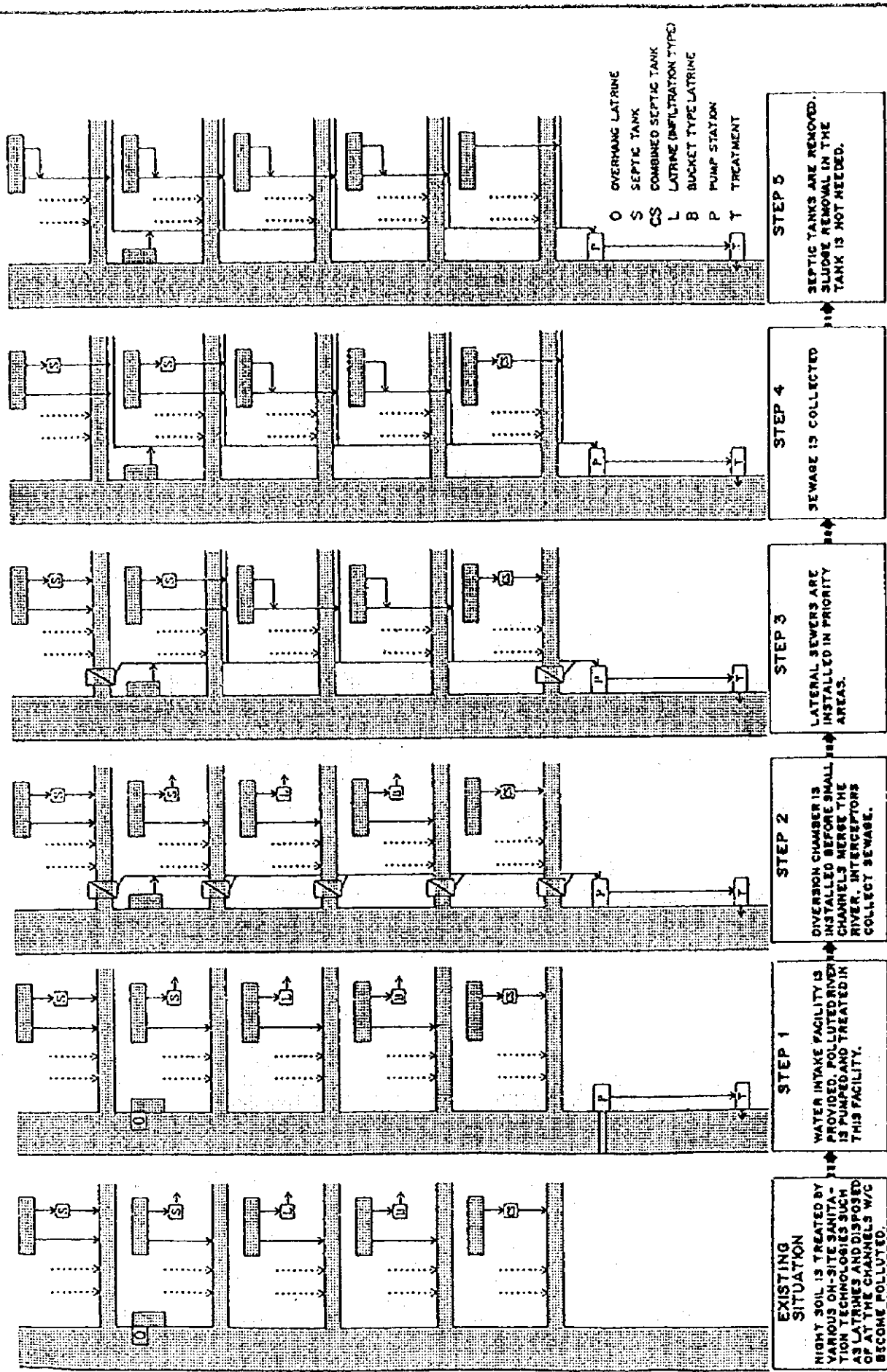
OPEN HOLE DRILLING & NATURAL GRAVEL PACK METHOD

DEEP WELLS

FIGURE 8.4.1

TYPICAL STRUCTURE OF LEVEL I WELL FACILITY

FIGURE 8.4.2 STAGED IMPROVEMENT IN SEWAGE COLLECTION METHOD



8.5 Service Coverage by Target Year

8.5.1 Water Supply

(1) Population to be served by Level II system in Phase I

Twenty-eight (28) untapped spring sources were confirmed to be suitable for Level II systems in rural water supply by the time of PW4SP preparation as shown in Table 8.5.1. Conditions and assumptions applied for this estimate are as follows:

Source capacity:

The average source capacity of untapped spring was assumed to meet the need of 100 households based on the review of existing Level II systems with spring sources.

Number of system:

Twenty-eight (28) untapped springs were considered to serve twenty-eight (28) Level II systems in twenty-eight (28) rural barangays of 9 municipalities.

Table 8.5.1 Population to be Served by Level II System in Phase I

| Name of Municipality | Number of Untapped Spring | Number of Barangay to be Served | Number of Households to be Served | Population to be Served |
|-----------------------------|---------------------------|---------------------------------|-----------------------------------|-------------------------|
| Bansalan | 4 | 4 | 402 | 1,972 |
| Digos (Capital) | | | | |
| Don Marcelino | 2 | 2 | 200 | 1,054 |
| Hagonoy | | | | |
| Jose Abad Santos (Trinidad) | 2 | 2 | 200 | 1,030 |
| Kiblawan | 4 | 4 | 403 | 2,080 |
| Magsaysay | | | | |
| Malalag | 4 | 4 | 403 | 2,044 |
| Malita | | | | |
| Matanao | 7 | 7 | 703 | 3,633 |
| Padada | | | | |
| Santa Cruz | 1 | 1 | 100 | 504 |
| Santa Maria | 2 | 2 | 200 | 1,042 |
| Sarangani | 2 | 2 | 201 | 1,074 |
| Sulop | | | | |
| PW4SP Study Area | 28 | 28 | 2,812 | 14,433 |

(2) Population to be served by target year

Phase I

For urban area, the additional service coverage was estimated to be served by Level III service. For rural area, the population to be served by Level II systems with untapped springs was first calculated and the rest of additional service coverage was estimated to be served by Level I facilities.

Phase II

For urban area, the population served by Level I and II facilities in base year was considered to be absorbed by Level III service aside from the additional service coverage to be estimated by the sector target. For rural area, all existing facilities in Phase I was assumed to be utilized through the future.

The population to be served by target year is exhibited in Table 8.5.2 and Table 8.5.3.

Table 8.5.2 Population to be Served in Phase I (Water Supply)

| Name of Municipality | Area | Population Served in the Base Year | | | | | Total Population | Phase I Coverage (2003) | | | | | | | | | |
|-----------------------------|-------|------------------------------------|----------|---------|------------------|------------------|------------------|-------------------------|------------------------------------|---------|---------|-----------|----------|---------|-------|--|--|
| | | Population Served in the Base Year | | | Total Population | Service Coverage | | | Additional Population to be Served | | | | | | | | |
| | | Level III | Level II | Level I | | Total | | Level III | Level II | Level I | Total | Level III | Level II | Level I | Total | | |
| Bantalan | Urban | 6,247 | 2,965 | 15,184 | 25,662 | 6,247 | 7,039 | 6,247 | | | | | | | | | |
| | Rural | 7,513 | 2,965 | 15,184 | 25,662 | 7,513 | 45,110 | 4,937 | 16,872 | 29,322 | 1,972 | 1,688 | 3,660 | | | | |
| | Total | 13,760 | 5,930 | 30,368 | 51,349 | 13,760 | 90,220 | 11,874 | 33,744 | 65,682 | 3,944 | 3,376 | 7,320 | | | | |
| Digos (Capital) | Urban | 30,498 | 6,778 | 37,276 | 67,802 | 30,498 | 46,518 | 30,498 | | | | | | | | | |
| | Rural | 3,735 | 2,830 | 47,062 | 53,627 | 76,002 | 122,520 | 34,233 | 2,830 | 47,062 | 53,627 | | | | | | |
| | Total | 34,233 | 2,830 | 84,338 | 121,429 | 106,500 | 169,038 | 68,466 | 5,660 | 100,689 | 109,254 | | | | | | |
| Don Marcelino | Urban | 934 | 4,469 | 5,403 | 12,845 | 12,845 | 4,873 | 934 | 4,469 | 10,276 | 4,873 | | | | | | |
| | Rural | 1,318 | 879 | 2,197 | 23,235 | 23,235 | 15,103 | 2,372 | 12,731 | 15,103 | 1,054 | 11,852 | 12,906 | | | | |
| | Total | 2,652 | 5,348 | 7,600 | 36,080 | 36,080 | 17,200 | 5,245 | 28,467 | 28,009 | 2,128 | 11,904 | 15,132 | | | | |
| Haguenoy | Urban | 3,239 | 1,672 | 1,684 | 6,595 | 7,556 | 3,239 | 1,672 | 1,684 | 6,595 | | | | | | | |
| | Rural | 150 | 33,793 | 33,943 | 40,959 | 40,959 | 150 | 33,793 | 33,943 | | | | | | | | |
| | Total | 3,389 | 35,465 | 35,627 | 47,555 | 48,515 | 3,389 | 35,465 | 35,627 | 47,555 | | | | | | | |
| Jose Abad Santos (Trinidad) | Urban | 963 | 8,795 | 8,795 | 46,578 | 46,578 | 963 | 8,795 | 8,795 | 46,578 | | | | | | | |
| | Rural | 2,049 | 2,423 | 10,481 | 13,104 | 32,262 | 2,049 | 2,423 | 10,481 | 13,104 | | | | | | | |
| | Total | 2,984 | 5,244 | 19,276 | 26,682 | 78,840 | 2,984 | 5,244 | 19,276 | 26,682 | | | | | | | |
| Kiblawan | Urban | 2,049 | 2,423 | 10,481 | 13,104 | 32,262 | 2,049 | 2,423 | 10,481 | 13,104 | | | | | | | |
| | Rural | 2,049 | 2,423 | 10,481 | 13,104 | 32,262 | 2,049 | 2,423 | 10,481 | 13,104 | | | | | | | |
| | Total | 4,098 | 4,846 | 20,962 | 26,208 | 64,524 | 4,098 | 4,846 | 20,962 | 26,208 | | | | | | | |
| Magaysay | Urban | 1,578 | 3,376 | 24,857 | 30,778 | 46,906 | 3,376 | 24,857 | 30,778 | 46,906 | | | | | | | |
| | Rural | 2,545 | 1,300 | 9,738 | 13,583 | 32,262 | 2,545 | 1,300 | 9,738 | 13,583 | | | | | | | |
| | Total | 4,123 | 4,676 | 34,595 | 44,361 | 79,168 | 4,123 | 4,676 | 34,595 | 44,361 | | | | | | | |
| Malalag | Urban | 918 | 1,735 | 2,653 | 5,066 | 5,066 | 918 | 1,735 | 2,653 | 5,066 | | | | | | | |
| | Rural | 1,150 | 353 | 14,190 | 15,693 | 29,881 | 1,150 | 353 | 14,190 | 15,693 | | | | | | | |
| | Total | 2,068 | 728 | 16,843 | 20,759 | 35,947 | 2,068 | 728 | 16,843 | 20,759 | | | | | | | |
| Maleta | Urban | 5,023 | 5,536 | 20,068 | 25,804 | 76,627 | 5,023 | 5,536 | 20,068 | 25,804 | | | | | | | |
| | Rural | 2,942 | 3,536 | 20,156 | 31,657 | 90,379 | 2,942 | 3,536 | 20,156 | 31,657 | | | | | | | |
| | Total | 7,965 | 9,072 | 40,224 | 57,461 | 167,006 | 7,965 | 9,072 | 40,224 | 57,461 | | | | | | | |
| Matanao | Urban | 2,141 | 451 | 2,592 | 4,513 | 4,513 | 2,141 | 451 | 2,592 | 4,513 | | | | | | | |
| | Rural | 94 | 2,781 | 24,522 | 27,398 | 44,113 | 94 | 2,781 | 24,522 | 27,398 | | | | | | | |
| | Total | 2,235 | 3,232 | 27,114 | 31,911 | 52,626 | 2,235 | 3,232 | 27,114 | 31,911 | | | | | | | |
| Padda | Urban | 6,492 | 1,890 | 8,352 | 10,116 | 10,116 | 6,492 | 1,890 | 8,352 | 10,116 | | | | | | | |
| | Rural | 1,570 | 1,025 | 4,202 | 6,797 | 14,909 | 1,570 | 1,025 | 4,202 | 6,797 | | | | | | | |
| | Total | 8,062 | 2,915 | 12,554 | 17,913 | 25,025 | 8,062 | 2,915 | 12,554 | 17,913 | | | | | | | |
| Santa Cruz | Urban | 8,473 | 5,568 | 14,043 | 22,971 | 22,971 | 8,473 | 5,568 | 14,043 | 22,971 | | | | | | | |
| | Rural | 1,026 | 4,065 | 16,630 | 21,721 | 44,580 | 1,026 | 4,065 | 16,630 | 21,721 | | | | | | | |
| | Total | 9,501 | 9,633 | 30,673 | 44,692 | 67,551 | 9,501 | 9,633 | 30,673 | 44,692 | | | | | | | |
| Santa Maria | Urban | 1,883 | 938 | 14,111 | 15,049 | 39,272 | 1,883 | 938 | 14,111 | 15,049 | | | | | | | |
| | Rural | 1,883 | 938 | 15,665 | 18,486 | 46,569 | 1,883 | 938 | 15,665 | 18,486 | | | | | | | |
| | Total | 3,766 | 1,876 | 29,776 | 33,535 | 85,841 | 3,766 | 1,876 | 29,776 | 33,535 | | | | | | | |
| Surangani | Urban | 1,300 | 1,300 | 4,213 | 6,813 | 15,926 | 1,300 | 1,300 | 4,213 | 6,813 | | | | | | | |
| | Rural | 1,800 | 2,289 | 3,189 | 5,513 | 18,965 | 1,800 | 2,289 | 3,189 | 5,513 | | | | | | | |
| | Total | 3,100 | 3,589 | 7,402 | 12,326 | 34,891 | 3,100 | 3,589 | 7,402 | 12,326 | | | | | | | |
| Sulop | Urban | 1,000 | 10,856 | 11,856 | 21,630 | 21,630 | 1,000 | 10,856 | 11,856 | 21,630 | | | | | | | |
| | Rural | 1,900 | 13,163 | 15,063 | 27,722 | 35,615 | 1,900 | 13,163 | 15,063 | 27,722 | | | | | | | |
| | Total | 2,900 | 24,019 | 26,919 | 49,352 | 57,245 | 2,900 | 24,019 | 26,919 | 49,352 | | | | | | | |
| PWASAP Study Area | Urban | 19,397 | 25,760 | 246,632 | 291,789 | 594,653 | 19,397 | 25,760 | 246,632 | 291,789 | | | | | | | |
| | Rural | 39,440 | 29,685 | 277,778 | 396,804 | 760,784 | 39,440 | 29,685 | 277,778 | 396,804 | | | | | | | |
| | Total | 58,837 | 55,445 | 524,410 | 688,593 | 1,355,437 | 58,837 | 55,445 | 524,410 | 688,593 | | | | | | | |

Table 8.5.3 Population to be Served in Phase II (Water Supply)

| Name of Municipality | Area | Population Served in 2003 | | | | | | Phase II Coverage (2010) | | | | | | | | | | |
|-----------------------------|-------|---------------------------|----------|---------|----------|------------------|-----------|--------------------------|---------|---------|-----------|----------|---------|---------|-----------|----------|---------|-----------|
| | | Level III | | | Level II | | | Level III | | | Level II | | | Level I | | | | |
| | | Level III | Level II | Level I | Total | Total Population | Level III | Level II | Level I | Total | Level III | Level II | Level I | Total | Level III | Level II | Level I | Total |
| Bansalan | Urban | 6,247 | | | 6,247 | 7,384 | 2,015 | | | 2,015 | 768 | | | 768 | | | | 768 |
| | Rural | 7,513 | 4,937 | 16,872 | 29,322 | 47,317 | 7,513 | 4,937 | 31,555 | 44,005 | | | | 44,005 | | | | 14,683 |
| | Total | 13,760 | 4,937 | 16,872 | 35,549 | 54,701 | 14,528 | 4,937 | 31,555 | 51,020 | 768 | | | 768 | | | | 14,683 |
| Digos (Capital) | Urban | 30,498 | | 6,778 | 37,276 | 51,542 | 48,965 | | 2,630 | 71,752 | 78,317 | | | 78,317 | | | | 24,685 |
| | Rural | 3,735 | 2,830 | 47,067 | 53,632 | 84,212 | 3,735 | 2,830 | 71,752 | 82,317 | | | | 82,317 | | | | 24,685 |
| | Total | 34,233 | 2,830 | 53,845 | 90,908 | 135,754 | 52,700 | 2,830 | 71,752 | 127,282 | 18,467 | | | 18,467 | | | | 49,370 |
| Don Marcelino | Urban | 4,873 | 934 | 4,409 | 10,276 | 14,719 | 13,983 | | 2,872 | 22,591 | 24,763 | | | 24,763 | | | | 9,660 |
| | Rural | 2,372 | 12,731 | 15,103 | 26,627 | 36,627 | 2,372 | 12,731 | 15,103 | 30,276 | 41,346 | | | 41,346 | | | | 18,770 |
| | Total | 4,873 | 13,665 | 17,200 | 25,376 | 41,346 | 13,983 | 2,872 | 22,591 | 38,746 | 9,110 | | | 9,110 | | | | 9,660 |
| Hagonoy | Urban | 3,239 | 1,672 | 1,684 | 6,595 | 8,437 | 8,015 | | 150 | 42,384 | 42,534 | | | 42,534 | | | | 8,591 |
| | Rural | 3,239 | 1,822 | 35,477 | 40,538 | 54,173 | 3,239 | 1,822 | 35,477 | 40,538 | 4,776 | | | 4,776 | | | | 8,591 |
| | Total | 3,239 | 1,822 | 35,477 | 40,538 | 54,173 | 3,239 | 1,822 | 35,477 | 40,538 | 9,552 | | | 9,552 | | | | 17,182 |
| Jose Abad Santos (Trinidad) | Urban | 3,449 | 1,030 | 29,246 | 30,276 | 49,066 | 3,449 | 1,030 | 29,246 | 30,276 | 49,066 | | | 49,066 | | | | 15,838 |
| | Rural | 5,080 | 4,503 | 19,087 | 28,940 | 48,572 | 5,080 | 4,503 | 19,087 | 28,940 | 48,572 | | | 48,572 | | | | 17,989 |
| | Total | 3,449 | 1,030 | 29,246 | 30,276 | 49,066 | 3,449 | 1,030 | 29,246 | 30,276 | 49,066 | | | 49,066 | | | | 33,827 |
| Kiblawan | Urban | 2,507 | 3,376 | 21,502 | 25,845 | 42,930 | 2,507 | 3,376 | 21,502 | 25,845 | 42,930 | | | 42,930 | | | | 14,099 |
| | Rural | 967 | 3,376 | 24,957 | 31,707 | 50,901 | 967 | 3,376 | 24,957 | 31,707 | 50,901 | | | 50,901 | | | | 19,145 |
| | Total | 3,474 | 3,376 | 24,957 | 31,707 | 50,901 | 3,474 | 3,376 | 24,957 | 31,707 | 50,901 | | | 50,901 | | | | 33,244 |
| Maguway | Urban | 2,318 | 2,397 | 15,876 | 19,423 | 32,843 | 2,318 | 2,397 | 15,876 | 19,423 | 32,843 | | | 32,843 | | | | 14,099 |
| | Rural | 1,150 | 2,997 | 17,611 | 21,758 | 36,411 | 1,150 | 2,997 | 17,611 | 21,758 | 36,411 | | | 36,411 | | | | 14,099 |
| | Total | 3,468 | 2,997 | 17,611 | 21,758 | 36,411 | 3,468 | 2,997 | 17,611 | 21,758 | 36,411 | | | 36,411 | | | | 28,198 |
| Malabag | Urban | 10,812 | 3,536 | 43,930 | 49,808 | 81,242 | 10,812 | 3,536 | 43,930 | 49,808 | 81,242 | | | 81,242 | | | | 14,099 |
| | Rural | 2,342 | 3,536 | 44,080 | 49,958 | 82,770 | 2,342 | 3,536 | 44,080 | 49,958 | 82,770 | | | 82,770 | | | | 14,099 |
| | Total | 13,154 | 3,536 | 44,080 | 49,958 | 82,770 | 13,154 | 3,536 | 44,080 | 49,958 | 82,770 | | | 82,770 | | | | 28,198 |
| Malita | Urban | 3,034 | | | 3,034 | 4,484 | 4,484 | | | | | | | | | | | 1,450 |
| | Rural | 94 | 6,414 | 22,165 | 28,673 | 47,408 | 94 | 6,414 | 22,165 | 28,673 | 47,408 | | | 47,408 | | | | 15,788 |
| | Total | 3,128 | 6,414 | 22,165 | 32,138 | 52,328 | 3,128 | 6,414 | 22,165 | 32,138 | 52,328 | | | 52,328 | | | | 17,238 |
| Matanau | Urban | 6,492 | 1,570 | 7,096 | 9,691 | 16,183 | 6,492 | 1,570 | 7,096 | 9,691 | 16,183 | | | 16,183 | | | | 5,361 |
| | Rural | 8,062 | 1,025 | 8,936 | 18,043 | 27,166 | 8,062 | 1,025 | 8,936 | 18,043 | 27,166 | | | 27,166 | | | | 5,361 |
| | Total | 6,492 | 1,025 | 8,936 | 18,043 | 27,166 | 6,492 | 1,025 | 8,936 | 18,043 | 27,166 | | | 27,166 | | | | 10,722 |
| Padada | Urban | 12,809 | 4,569 | 23,309 | 28,964 | 49,128 | 12,809 | 4,569 | 23,309 | 28,964 | 49,128 | | | 49,128 | | | | 11,250 |
| | Rural | 13,835 | 4,569 | 28,937 | 47,341 | 74,453 | 13,835 | 4,569 | 28,937 | 47,341 | 74,453 | | | 74,453 | | | | 16,725 |
| | Total | 4,284 | | | 4,284 | 7,885 | 7,491 | | | | | | | | | | | 27,975 |
| Santa Cruz | Urban | 1,980 | 23,547 | 25,527 | 42,437 | 50,322 | 1,980 | 23,547 | 25,527 | 42,437 | 50,322 | | | 50,322 | | | | 13,939 |
| | Rural | 4,284 | 1,980 | 25,101 | 31,365 | 50,322 | 4,284 | 1,980 | 25,101 | 31,365 | 50,322 | | | 50,322 | | | | 13,939 |
| | Total | 1,123 | 1,300 | 9,284 | 10,388 | 17,539 | 1,123 | 1,300 | 9,284 | 10,388 | 17,539 | | | 17,539 | | | | 17,446 |
| Santa Maria | Urban | 1,123 | 2,374 | 9,284 | 12,781 | 20,873 | 1,123 | 2,374 | 9,284 | 12,781 | 20,873 | | | 20,873 | | | | 5,953 |
| | Rural | 2,585 | 2,374 | 9,284 | 12,781 | 20,873 | 2,585 | 2,374 | 9,284 | 12,781 | 20,873 | | | 20,873 | | | | 5,953 |
| | Total | 1,000 | 13,060 | 14,060 | 22,703 | 29,098 | 7,075 | | | | | | | | | | | 3,490 |
| Sarangani | Urban | 3,851 | 15,349 | 18,934 | 29,098 | 7,075 | 3,851 | 15,349 | 18,934 | 29,098 | 7,075 | | | 29,098 | | | | 7,054 |
| | Rural | 99,350 | 3,906 | 31,146 | 134,402 | 182,230 | 173,119 | | | | | | | | | | | 7,054 |
| | Total | 19,397 | 40,193 | 338,605 | 386,395 | 647,318 | 19,397 | 40,193 | 338,605 | 386,395 | 647,318 | | | 647,318 | | | | 203,810 |
| Sulop | Urban | 118,747 | 44,099 | 369,751 | 532,597 | 829,548 | 192,316 | | | | | | | | | | | 203,810 |
| | Rural | | | | | | | | | | | | | | | | | 203,810 |
| | Total | | | | | | | | | | | | | | | | | 2,773,570 |
| PWASP Study Area | Urban | | | | | | | | | | | | | | | | | |
| | Rural | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | |

8.5.2 Sanitation

Table 8.5.4 Additional Number of Households to be Served in Phase I (Household Toilets)

| Name of Municipality | Area | No. of Household Served | | | | in the | | | | Phase I Coverage (2003) | | | | |
|-----------------------------|-------|-------------------------|------------|---------|---------|--------------------|--------|------------------------------------|---------|-------------------------|-------|------------------------------------|---------|--------|
| | | Based Year | | Total | | Household Coverage | | Additional No. of HHs to be Served | | Household Coverage | | Additional No. of HHs to be Served | | |
| | | Flush | Pour Flush | VTP/Dry | Total | Total No. of HHs | Flush | Pour Flush | VTP/Dry | Total | Flush | Pour Flush | VTP/Dry | Total |
| Bansalan | Urban | 32 | 861 | 103 | 996 | 1,466 | 293 | 763 | 117 | 1,173 | 261 | | 14 | 275 |
| | Rural | 42 | 6,716 | 973 | 7,771 | 9,150 | 412 | 6,588 | 1,233 | 8,233 | 330 | | 262 | 592 |
| | Total | 114 | 7,577 | 1,076 | 7,771 | 10,616 | 705 | 7,351 | 1,352 | 9,408 | 591 | | 276 | 867 |
| Digos (Capital) | Urban | 2,278 | 4,813 | 197 | 7,288 | 9,455 | 1,891 | 4,917 | 756 | 7,564 | 104 | | 559 | 663 |
| | Rural | 397 | 11,685 | 1,361 | 13,443 | 15,200 | 684 | 10,944 | 2,052 | 13,680 | 287 | | 691 | 978 |
| | Total | 2,675 | 16,498 | 1,558 | 17,443 | 24,655 | 2,575 | 15,861 | 2,803 | 21,244 | 287 | | 1,250 | 1,641 |
| Don Marcelino | Urban | 42 | 767 | 29 | 838 | 2,475 | 495 | 1,287 | 198 | 1,980 | 433 | | 520 | 1,348 |
| | Rural | 13 | 1,972 | 950 | 2,935 | 4,409 | 13 | 3,360 | 595 | 3,968 | 1,288 | | 169 | 2,530 |
| | Total | 55 | 2,739 | 979 | 2,935 | 6,884 | 508 | 4,647 | 793 | 5,948 | 433 | | 188 | 454 |
| Hagonoy | Urban | 38 | 602 | 166 | 806 | 1,520 | 304 | 790 | 122 | 1,216 | 266 | | 64 | 1,189 |
| | Rural | 38 | 5,091 | 1,040 | 6,169 | 8,175 | 38 | 6,216 | 1,104 | 7,338 | 1,125 | | 64 | 1,663 |
| | Total | 76 | 5,693 | 1,206 | 6,169 | 9,695 | 342 | 7,006 | 1,226 | 8,574 | 2,066 | | 128 | 1,846 |
| Jose Abad Santos (Trinidad) | Urban | 28 | 471 | 195 | 684 | 1,059 | 212 | 550 | 85 | 847 | 184 | | 79 | 363 |
| | Rural | 34 | 4,698 | 1,129 | 5,861 | 9,044 | 34 | 6,895 | 1,221 | 8,140 | 184 | | 92 | 2,279 |
| | Total | 62 | 5,169 | 1,324 | 5,861 | 10,103 | 246 | 7,435 | 1,206 | 8,987 | 368 | | 171 | 4,652 |
| Kiblawan | Urban | 42 | 553 | 186 | 781 | 1,395 | 279 | 725 | 112 | 1,116 | 237 | | 172 | 409 |
| | Rural | 33 | 3,988 | 1,130 | 5,151 | 6,973 | 33 | 5,302 | 941 | 6,276 | 1,488 | | 131 | 1,723 |
| | Total | 75 | 4,541 | 1,316 | 5,151 | 8,348 | 312 | 6,027 | 1,053 | 7,392 | 2,377 | | 303 | 3,872 |
| Maguaysay | Urban | 26 | 604 | 128 | 758 | 1,412 | 283 | 734 | 113 | 1,130 | 257 | | 130 | 387 |
| | Rural | 31 | 4,424 | 1,208 | 5,663 | 7,776 | 350 | 5,598 | 1,050 | 6,998 | 319 | | 174 | 1,493 |
| | Total | 57 | 5,028 | 1,336 | 5,663 | 9,188 | 633 | 6,332 | 1,163 | 8,128 | 576 | | 304 | 1,840 |
| Malabag | Urban | 30 | 638 | 145 | 833 | 1,045 | 209 | 543 | 84 | 836 | 179 | | 221 | 400 |
| | Rural | 42 | 4,282 | 850 | 5,174 | 5,848 | 263 | 4,211 | 789 | 5,263 | 400 | | 221 | 400 |
| | Total | 72 | 4,940 | 995 | 5,174 | 6,993 | 472 | 4,754 | 873 | 6,099 | 400 | | 221 | 400 |
| Malita | Urban | 110 | 1,404 | 202 | 1,716 | 2,655 | 531 | 1,381 | 212 | 2,124 | 421 | | 10 | 431 |
| | Rural | 278 | 10,411 | 1,525 | 12,214 | 15,204 | 684 | 10,947 | 2,053 | 13,684 | 406 | | 528 | 1,470 |
| | Total | 388 | 11,815 | 1,727 | 12,214 | 17,859 | 1,215 | 12,328 | 2,265 | 15,808 | 827 | | 538 | 1,901 |
| Matanao | Urban | 174 | 247 | 171 | 592 | 873 | 126 | 453 | 70 | 698 | 1 | | 206 | 207 |
| | Rural | 48 | 4,867 | 1,150 | 6,095 | 8,500 | 94 | 6,408 | 1,148 | 7,650 | 46 | | 1,541 | 1,587 |
| | Total | 222 | 5,114 | 1,321 | 6,065 | 9,373 | 269 | 6,861 | 1,218 | 8,348 | 47 | | 1,747 | 1,794 |
| Paddala | Urban | 120 | 542 | 94 | 746 | 1,080 | 196 | 1,030 | 158 | 1,584 | 276 | | 488 | 838 |
| | Rural | 45 | 2,545 | 90 | 2,680 | 3,061 | 138 | 2,204 | 413 | 2,555 | 93 | | 323 | 416 |
| | Total | 165 | 3,087 | 174 | 2,680 | 5,041 | 534 | 3,234 | 571 | 4,339 | 369 | | 488 | 1,254 |
| Santa Cruz | Urban | 220 | 1,553 | 356 | 2,129 | 4,504 | 901 | 2,342 | 360 | 3,603 | 681 | | 789 | 1,047 |
| | Rural | 73 | 5,043 | 1,341 | 7,057 | 8,041 | 398 | 6,365 | 1,194 | 7,957 | 325 | | 722 | 1,047 |
| | Total | 293 | 7,196 | 1,697 | 7,057 | 13,345 | 1,299 | 8,707 | 1,554 | 11,560 | 1,006 | | 1,511 | 2,531 |
| Santa Maria | Urban | 40 | 738 | 91 | 869 | 1,414 | 283 | 725 | 113 | 1,131 | 743 | | 22 | 265 |
| | Rural | 37 | 4,693 | 1,116 | 5,846 | 7,538 | 37 | 5,729 | 1,018 | 6,784 | 1,036 | | 22 | 1,036 |
| | Total | 77 | 5,431 | 1,207 | 5,846 | 8,952 | 320 | 6,464 | 1,131 | 7,915 | 243 | | 41 | 1,301 |
| Surangani | Urban | 16 | 256 | 153 | 425 | 573 | 115 | 297 | 46 | 458 | 99 | | 41 | 140 |
| | Rural | 12 | 786 | 523 | 1,323 | 2,968 | 12 | 2,238 | 401 | 2,671 | 99 | | 1,472 | 1,672 |
| | Total | 28 | 1,042 | 676 | 1,323 | 3,541 | 127 | 2,555 | 447 | 3,129 | 132 | | 1,444 | 1,612 |
| Sulop | Urban | 116 | 499 | 112 | 727 | 1,238 | 248 | 643 | 99 | 990 | 132 | | 144 | 276 |
| | Rural | 22 | 1,543 | 1,026 | 2,591 | 4,370 | 197 | 3,146 | 580 | 3,933 | 175 | | 1,603 | 1,778 |
| | Total | 138 | 2,042 | 1,138 | 2,591 | 5,608 | 445 | 3,789 | 669 | 4,923 | 307 | | 1,747 | 2,054 |
| PWASP Study Area | Urban | 3,312 | 14,568 | 2,318 | 20,198 | 23,064 | 6,615 | 17,190 | 2,645 | 26,450 | 3,690 | | 852 | 7,403 |
| | Rural | 1,185 | 73,344 | 15,414 | 89,943 | 117,057 | 3,387 | 86,161 | 15,804 | 105,352 | 2,202 | | 1,998 | 18,260 |
| | Total | 4,497 | 87,912 | 17,732 | 110,141 | 150,121 | 10,002 | 103,351 | 18,449 | 131,802 | 5,892 | | 2,812 | 25,663 |

Table 8.5.5 Additional Number of Households to be Served in Phase II (Household Toilets)

| Name of Municipality | Area | No. households Served in 2003 | | | | | Total No. of HHs | Phase II Coverage (2010) | | | | | Total | |
|-----------------------------|-------|-------------------------------|------------|---------|---------|---------|------------------|------------------------------------|------------|---------|--------|--------|-------|------------|
| | | Household Coverage | | | | | | Additional No. of HHs to be Served | | | | | | |
| | | Flush | Pour Flush | VIP/Dry | Total | Total | | Flush | Pour Flush | VIP/Dry | Total | Flush | | Pour Flush |
| Bansalan | Urban | 293 | 763 | 117 | 1,173 | 1,246 | 687 | 913 | 117 | 1,717 | 394 | 150 | 0 | 544 |
| | Rural | 412 | 6,388 | 1,235 | 8,235 | 11,229 | 1,124 | 8,379 | 1,235 | 11,238 | 712 | 2,291 | 0 | 3,003 |
| | Total | 705 | 7,151 | 2,452 | 9,408 | 12,475 | 2,249 | 9,292 | 2,452 | 12,475 | 1,106 | 2,441 | 0 | 3,547 |
| Digos (Capital) | Urban | 1,891 | 4,917 | 756 | 7,564 | 12,886 | 4,794 | 6,434 | 756 | 11,984 | 2,903 | 1,517 | 0 | 4,420 |
| | Rural | 684 | 10,944 | 2,052 | 13,680 | 21,053 | 2,000 | 15,948 | 2,052 | 20,000 | 1,316 | 5,004 | 0 | 6,320 |
| | Total | 2,575 | 15,861 | 2,808 | 21,244 | 33,939 | 6,794 | 22,392 | 2,808 | 31,984 | 4,219 | 6,321 | 0 | 10,540 |
| Don Marcelino | Urban | 495 | 1,287 | 198 | 1,980 | 3,680 | 1,369 | 1,855 | 198 | 3,422 | 874 | 588 | 0 | 1,462 |
| | Rural | 13 | 3,360 | 595 | 3,968 | 6,657 | 153 | 5,716 | 595 | 6,324 | 0 | 2,356 | 0 | 2,356 |
| | Total | 508 | 4,647 | 793 | 5,948 | 10,337 | 1,522 | 7,571 | 793 | 9,746 | 874 | 2,924 | 0 | 3,798 |
| Maguoy | Urban | 304 | 790 | 172 | 1,266 | 1,961 | 784 | 1,055 | 172 | 1,961 | 480 | 265 | 0 | 745 |
| | Rural | 38 | 6,216 | 1,04 | 7,358 | 11,434 | 38 | 9,720 | 1,104 | 10,824 | 0 | 3,504 | 0 | 3,504 |
| | Total | 342 | 7,006 | 1,226 | 8,574 | 13,543 | 822 | 10,775 | 1,226 | 12,823 | 480 | 3,769 | 0 | 4,249 |
| Jose Abad Santos (Trinidad) | Urban | 212 | 550 | 85 | 847 | 1,469 | 546 | 735 | 85 | 1,366 | 334 | 185 | 0 | 519 |
| | Rural | 34 | 6,885 | 1,221 | 8,140 | 12,402 | 34 | 10,527 | 1,221 | 11,782 | 0 | 3,642 | 0 | 3,642 |
| | Total | 246 | 7,435 | 1,306 | 8,987 | 13,871 | 580 | 11,262 | 1,306 | 13,148 | 334 | 3,827 | 0 | 4,161 |
| Xibibawan | Urban | 279 | 725 | 112 | 1,116 | 1,897 | 706 | 946 | 112 | 1,764 | 427 | 221 | 0 | 648 |
| | Rural | 33 | 5,302 | 1,053 | 7,392 | 12,143 | 33 | 8,700 | 1,053 | 9,754 | 0 | 3,458 | 0 | 3,458 |
| | Total | 312 | 6,027 | 2,165 | 8,544 | 14,035 | 739 | 9,706 | 2,165 | 11,498 | 427 | 3,679 | 0 | 4,166 |
| Maguayay | Urban | 283 | 744 | 113 | 1,140 | 1,988 | 740 | 996 | 113 | 1,849 | 457 | 262 | 0 | 719 |
| | Rural | 350 | 5,598 | 1,050 | 6,998 | 10,738 | 967 | 8,184 | 1,050 | 10,291 | 617 | 2,586 | 0 | 3,203 |
| | Total | 633 | 6,342 | 2,163 | 8,128 | 12,726 | 1,707 | 9,180 | 2,163 | 12,050 | 1,074 | 2,848 | 0 | 3,922 |
| Malabag | Urban | 209 | 543 | 84 | 836 | 1,392 | 518 | 693 | 84 | 1,299 | 309 | 150 | 0 | 459 |
| | Rural | 263 | 4,211 | 789 | 5,263 | 8,211 | 789 | 6,231 | 789 | 7,800 | 517 | 2,020 | 0 | 2,537 |
| | Total | 472 | 4,754 | 873 | 6,099 | 9,603 | 1,298 | 6,924 | 873 | 9,099 | 826 | 2,170 | 0 | 2,996 |
| Malita | Urban | 531 | 1,381 | 212 | 2,124 | 3,632 | 1,351 | 1,815 | 212 | 3,378 | 820 | 434 | 0 | 1,254 |
| | Rural | 684 | 10,947 | 2,053 | 13,684 | 20,311 | 1,900 | 15,312 | 2,053 | 19,295 | 1,246 | 4,365 | 0 | 5,611 |
| | Total | 1,215 | 12,328 | 2,265 | 15,808 | 23,943 | 3,251 | 17,127 | 2,265 | 22,673 | 2,066 | 4,799 | 0 | 6,863 |
| Matanao | Urban | 175 | 453 | 70 | 698 | 1,180 | 439 | 588 | 70 | 1,097 | 264 | 135 | 0 | 399 |
| | Rural | 94 | 6,408 | 1,148 | 7,650 | 11,952 | 94 | 10,112 | 1,148 | 11,354 | 0 | 3,704 | 0 | 3,704 |
| | Total | 269 | 7,061 | 2,218 | 9,348 | 13,132 | 533 | 10,700 | 2,218 | 12,451 | 264 | 3,839 | 0 | 4,103 |
| Padada | Urban | 396 | 1,030 | 138 | 1,564 | 2,745 | 1,021 | 1,374 | 138 | 2,553 | 625 | 344 | 0 | 969 |
| | Rural | 138 | 2,204 | 413 | 2,755 | 4,046 | 384 | 3,047 | 413 | 3,844 | 246 | 843 | 0 | 1,089 |
| | Total | 534 | 3,234 | 551 | 4,339 | 6,791 | 1,405 | 4,421 | 571 | 6,397 | 871 | 1,187 | 0 | 2,058 |
| Santa Cruz | Urban | 901 | 2,342 | 360 | 3,603 | 6,331 | 2,355 | 3,173 | 360 | 5,888 | 1,454 | 831 | 0 | 2,285 |
| | Rural | 308 | 6,365 | 1,194 | 7,957 | 12,282 | 1,026 | 9,448 | 1,194 | 11,668 | 628 | 3,083 | 0 | 3,711 |
| | Total | 1,209 | 8,707 | 1,554 | 11,560 | 18,613 | 3,381 | 12,621 | 1,554 | 17,556 | 2,082 | 3,914 | 0 | 5,996 |
| Santa Maria | Urban | 263 | 713 | 113 | 1,131 | 1,971 | 987 | 1,405 | 113 | 1,833 | 430 | 252 | 0 | 702 |
| | Rural | 37 | 5,729 | 1,018 | 6,784 | 10,609 | 37 | 9,024 | 1,018 | 10,979 | 0 | 3,295 | 0 | 3,295 |
| | Total | 300 | 12,842 | 2,131 | 14,915 | 21,580 | 724 | 13,429 | 2,131 | 21,958 | 430 | 3,547 | 0 | 3,997 |
| Sarangani | Urban | 115 | 297 | 46 | 458 | 834 | 310 | 420 | 46 | 776 | 195 | 123 | 0 | 318 |
| | Rural | 12 | 2,528 | 401 | 2,621 | 4,385 | 12 | 3,753 | 401 | 4,166 | 0 | 1,495 | 0 | 1,495 |
| | Total | 127 | 2,825 | 447 | 3,129 | 5,219 | 322 | 4,173 | 447 | 4,942 | 195 | 1,618 | 0 | 1,813 |
| Sulop | Urban | 248 | 643 | 99 | 990 | 1,599 | 595 | 793 | 99 | 1,487 | 347 | 150 | 0 | 497 |
| | Rural | 197 | 3,146 | 590 | 3,933 | 5,676 | 539 | 4,263 | 590 | 5,392 | 1,117 | 500 | 0 | 1,499 |
| | Total | 445 | 3,789 | 689 | 4,923 | 7,275 | 1,134 | 5,056 | 689 | 6,879 | 689 | 1,267 | 0 | 1,956 |
| PWASAP Study Area | Urban | 6,615 | 17,190 | 2,645 | 26,450 | 45,559 | 16,948 | 22,777 | 2,645 | 42,370 | 10,333 | 5,287 | 0 | 15,920 |
| | Rural | 3,387 | 86,161 | 15,804 | 105,352 | 161,831 | 9,011 | 128,924 | 15,804 | 153,729 | 5,624 | 42,763 | 0 | 48,387 |
| | Total | 10,002 | 103,351 | 18,449 | 131,802 | 207,390 | 25,959 | 151,701 | 18,449 | 196,109 | 15,957 | 48,350 | 0 | 64,307 |

Table 8.5.6 Additional Number of Public School Students to be Served in Phases I and II (School Toilets)

| Name of Municipality | Std. No. of Public School Student that can be Served in the Base Year (1997) | Projected No. of Public School Student in 2000 | Phase I Coverage (2003) | | Projected Number of Public School Students in 2010 | Phase II Coverage (2010) | |
|-----------------------------|--|--|---------------------------------|--|--|---------------------------------|---|
| | | | Public School Students Coverage | Additional No. of Public School Student to be Served | | Public School Students Coverage | Additional No. of Public School Students to be Served |
| Bansalan | 3,600 | 11,473 | 6,884 | 3,284 | 12,475 | 9,980 | 3,096 |
| Digos (Capital) | 6,240 | 31,379 | 18,827 | 12,587 | 34,768 | 27,814 | 8,987 |
| Don Marcelino | 2,640 | 6,875 | 4,125 | 1,485 | 8,485 | 6,788 | 2,663 |
| Hagonoy | 3,360 | 10,826 | 6,496 | 3,136 | 12,532 | 10,026 | 3,530 |
| Jose Abad Santos (Trinidad) | 2,880 | 7,550 | 4,530 | 1,650 | 8,740 | 6,992 | 2,462 |
| Kiblawan | 2,400 | 8,196 | 4,918 | 2,518 | 9,976 | 7,981 | 3,063 |
| Magsaysay | 3,360 | 11,207 | 6,724 | 3,364 | 12,877 | 10,302 | 3,578 |
| Malalag | 2,640 | 7,910 | 4,746 | 2,106 | 9,123 | 7,298 | 2,552 |
| Mahita | 9,120 | 19,375 | 11,625 | 2,505 | 21,105 | 16,884 | 5,259 |
| Matanao | 4,320 | 11,817 | 7,090 | 2,770 | 13,098 | 10,478 | 3,388 |
| Padada | 1,920 | 4,956 | 2,974 | 1,054 | 5,738 | 4,590 | 1,616 |
| Santa Cruz | 6,240 | 18,024 | 10,814 | 4,574 | 19,871 | 15,897 | 5,083 |
| Santa Maria | 5,280 | 11,274 | 6,764 | 1,484 | 13,053 | 10,442 | 3,678 |
| Sarangani | 3,120 | 7,919 | 4,751 | 1,631 | 8,716 | 6,973 | 2,222 |
| Sulop | 2,640 | 5,247 | 3,148 | 508 | 5,508 | 4,406 | 1,258 |
| PW4SP Study Area | 59,760 | 174,028 | 104,416 | 44,656 | 196,065 | 156,851 | 52,455 |

Table 8.5.7 Additional Number of Public Utilities with Sanitary Toilets in Phase I and II

| Name of Municipality | Type | Coverage in Base Year (1997) | | Phase I Coverage (2003) | | | Phase I Coverage (2010) | | |
|-----------------------------|----------------------|-----------------------------------|---------------------------------|-----------------------------------|---|---------------------------------|-----------------------------------|---|---------------------------------|
| | | No. of PU with Toilets Facilities | No. of PU with Sanitary Toilets | No. of PU with Toilets Facilities | Add'l No. of Public Utilities with Sanitary Toilets | No. of PU with Sanitary Toilets | No. of PU with Toilets Facilities | Add'l No. of Public Utilities with Sanitary Toilets | No. of PU with Sanitary Toilets |
| Bansalan | Public Market | 1 | 1 | 1 | | 1 | 2 | 1 | 2 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Total | 2 | 2 | 3 | 1 | 3 | 4 | 1 | 4 |
| Digos (Capital) | Public Market | 2 | 2 | 2 | | 2 | 4 | 2 | 4 |
| | Bus/Jeepney Terminal | | | 2 | 2 | 2 | 2 | | 2 |
| | Parks/Playground | | | | | | | | |
| | Total | 2 | 2 | 4 | 2 | 4 | 6 | 2 | 6 |
| Don Marcelino | Public Market | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 2 | 1 | 2 | 2 | | 2 |
| Hagonoy | Public Market | 1 | 1 | 1 | | 1 | 2 | 1 | 2 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 3 |
| Jose Abad Santos (Trinidad) | Public Market | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Bus/Jeepney Terminal | | | | | | | | |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 1 | | 1 | 1 | | 1 |
| Kiblawan | Public Market | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 2 | 1 | 2 | 2 | | 2 |
| Magsaysay | Public Market | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 2 | 1 | 2 | 2 | | 2 |
| Malabag | Public Market | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 2 | 1 | 2 | 2 | | 2 |
| Malita | Public Market | 3 | 1 | 3 | 2 | 3 | 5 | 2 | 5 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 3 | 1 | 4 | 3 | 4 | 6 | 2 | 6 |
| Matanao | Public Market | 5 | 1 | 5 | 4 | 5 | 5 | | 5 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 5 | 1 | 6 | 5 | 6 | 6 | | 6 |
| Paalada | Public Market | 1 | 1 | 1 | | 1 | 2 | 1 | 2 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 3 |
| Santa Cruz | Public Market | 2 | 1 | 2 | 1 | 2 | 2 | | 2 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 2 | 1 | 3 | 2 | 3 | 3 | | 3 |
| Santa Maria | Public Market | 2 | 1 | 2 | 1 | 2 | 2 | | 2 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | | | | | | | | |
| | Total | 2 | 1 | 3 | 2 | 3 | 3 | | 3 |
| Sarangani | Public Market | 1 | 1 | 1 | | 1 | 2 | 1 | 2 |
| | Bus/Jeepney Terminal | | | | | | | | |
| | Parks/Playground | | | | | | | | |
| | Total | 1 | 1 | 1 | | 1 | 2 | 1 | 2 |
| Sulop | Public Market | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Bus/Jeepney Terminal | | | 1 | 1 | 1 | 1 | | 1 |
| | Parks/Playground | 1 | 1 | 1 | | 1 | 1 | | 1 |
| | Total | 2 | 2 | 3 | 1 | 3 | 3 | | 3 |
| PW4SP Study Area | Public Market | 24 | 16 | 24 | 8 | 24 | 32 | 8 | 32 |
| | Bus/Jeepney Terminal | | | 14 | 14 | 14 | 14 | | 14 |
| | Parks/Playground | 2 | 2 | 2 | | 2 | 2 | | 2 |
| | Total | 26 | 18 | 40 | 22 | 40 | 48 | 8 | 48 |

8.6 Facilities, Equipment and Rehabilitation Required to Meet the Target Services

8.6.1 Water Supply

(1) Required water supply facilities

Urban water supply:

Urban water supply facilities required by target year shown in Table 8.6.1 were estimated as the required number of house connections based on the additional service coverage.

As reference, the following requirements were also estimated:

- daily average water demand at 100 lpcd consumption rate, and
- number of deep wells to meet the daily maximum water demand based on the groundwater productivity.

(daily maximum water demand = 1.3 x daily average water demand)

Information pertaining to the expansion plan of Level III systems was arranged to be indicated in Table 8.6.1 and details in Table 8.6.2, however, required data were not available during this PW4SP preparation.

Rural water supply:

Rural water supply facilities required by target year shown in Table 8.6.3(a) were estimated as the number of Level II systems with number of communal faucets and the number of Level I wells broken-down to deep and shallow wells. Twenty-eight (28) untapped springs suitable for Level II system were confirmed during this PW4SP preparation.

(2) Required well drilling and rehabilitation equipment

Presently, only one unit of truck-mounted percussion drilling rig is available at DPWH-DEO in the province.

Taking into account the maximum utilization of existing equipment, additional number of required equipment is estimated as described below.

Applicable type of well drilling equipment is determined considering the geological formation of the province, the easiness to technically operate. Both types of percussion and rotary are suitable for the soft and hard formations, and the percussion type can be easily operated and maintained without special training to drillers compared with the latter, it is very useful to bores in the boulders or cobbles formations. Thus, the drilling equipment of percussion type is recommended to be selected in the PW4SP preparation.

Table 8.6.1 Urban Water Supply Facilities Required by Target Year

| Name of Municipality | Reference on Expansion of Existing Level III System Name of Operating Body | Coverage in 1997 | | | | Type of Water Source | Plan for Expansion | Phase I (2003) Requirements | | | | Phase II (2010) Requirements | | | |
|------------------------------|---|------------------|------------------------|-------------------|------------------------------------|----------------------|--------------------|-----------------------------|--|------------------------------------|------------------------------------|------------------------------|--|------------------------------------|--|
| | | Area | No. of Barangay Served | Served Population | Additional Population to be Served | | | Number of House Connections | Daily Average Water Demand (m ³ /day) | Number of Spring Dev'ls/ Deep Well | Additional Population to be Served | Number of House Connections | Daily Average Water Demand (m ³ /day) | Number of Spring Dev'ls/ Deep Well | |
| | | | | | | | | | | | | | | | |
| Bantalan | Bantalan WD | Urban | 1 | 6,247 | DW/SP | No | | | | | | | | | |
| | | Rural | 10 | 7,513 | | | | | | | | | | | |
| | | Total | 11 | 13,760 | | | | | | | | | | | |
| Digos (Capital) | Digos WD | Urban | 1 | 30,499 | DW | No | | | | | | | | | |
| | | Rural | 6 | 3,733 | | | | | | | | | | | |
| | | Total | 7 | 34,233 | | | | | | | | | | | |
| Oon Marcelino | Not Applicable | Urban | N.A. | N.A. | N.A. | N.A. | 4,973 | 939 | 487 | 1 | 9,110 | 2,278 | 911 | 2 | |
| | | Rural | N.A. | N.A. | | | | | | | | | | | |
| | | Total | N.A. | N.A. | | | | | | | | | | | |
| Hagonoy | Hagonoy WD | Urban | 1 | 1,370 | DW | No | | | | | | | | | |
| | | Rural | | | | | | | | | | | | | |
| | | Total | 1 | 1,370 | | | | | | | | | | | |
| | Hagonoy RWSA | Urban | 1 | 1,869 | DW | No | | | | | | | | | |
| | | Rural | | | | | | | | | | | | | |
| | | Total | 1 | 1,869 | | | | | | | | | | | |
| Municipal Total | Urban | 2 | 3,239 | | | | | | | | | | | | |
| | Rural | | | | | | | | | | | | | | |
| | Total | 2 | 3,239 | | | | | | | | | | | | |
| Jose Abad Santos (Terinidad) | Not Applicable | Urban | N.A. | N.A. | N.A. | N.A. | 3,449 | 662 | 345 | 1 | 2,431 | 533 | 243 | 1 | |
| | | Rural | N.A. | N.A. | | | | | | | | | | | |
| | | Total | N.A. | N.A. | | | | | | | | | | | |
| Kiblawan | Kiblawan WD | Urban | 1 | 2,049 | DW | No | 3,031 | 630 | 303 | 1 | 2,128 | 532 | 213 | 1 | |
| | | Rural | | | | | | | | | | | | | |
| | | Total | 1 | 2,049 | | | | | | | | | | | |
| Magsaysay | Magsaysay RWSA | Urban | 1 | 1,578 | DW | No | 929 | 129 | 93 | 1 | 5,046 | 1,262 | 505 | 1 | |
| | | Rural | | | | | | | | | | | | | |
| | | Total | 1 | 1,578 | | | | | | | | | | | |
| | Facul WWA | Urban | | | SP | No | | | | | | | | | |
| | | Rural | 1 | 967 | | | | | | | | | | | |
| | | Total | 1 | 967 | | | | | | | | | | | |
| Municipal Total | Urban | 1 | 1,578 | | | | | | | | | | | | |
| | Rural | 1 | 967 | | | | | | | | | | | | |
| | Total | 2 | 2,545 | | | | | | | | | | | | |
| Malabog | Malabog WWS | Urban | 3 | 918 | DW | No | 1,400 | 289 | 140 | 1 | 2,972 | 743 | 297 | 1 | |
| | | Rural | 2 | 1,150 | | | | | | | | | | | |
| | | Total | 3 | 2,068 | | | | | | | | | | | |
| Matira | Matira RWSA | Urban | 1 | 5,623 | DW | No | 5,189 | 1,006 | 519 | 1 | 2,990 | 748 | 299 | 1 | |
| | | Rural | 1 | 2,342 | | | | | | | | | | | |
| | | Total | 2 | 7,965 | | | | | | | | | | | |
| Matunao | Ninga WWA | Urban | | | DW | No | 893 | 179 | 89 | 1 | 1,450 | 363 | 145 | 1 | |
| | | Rural | 1 | 94 | | | | | | | | | | | |
| | | Total | 1 | 94 | | | | | | | | | | | |
| | Matunao RWSA | Urban | 1 | 2,141 | DW | No | | | | | | | | | |
| | | Rural | | | | | | | | | | | | | |
| | | Total | 1 | 2,141 | | | | | | | | | | | |
| Municipal Total | Urban | 1 | 2,141 | | | | | | | | | | | | |
| | Rural | 1 | 94 | | | | | | | | | | | | |
| | Total | 2 | 2,235 | | | | | | | | | | | | |
| Padada | Padada WSC | Urban | 1 | 6,497 | DW | No | | | | | | | | | |
| | | Rural | 4 | 899 | | | | | | | | | | | |
| | | Total | 5 | 7,391 | | | | | | | | | | | |
| | Piape RWSA | Urban | | | DW | No | | | | | | | | | |
| | | Rural | 3 | 671 | | | | | | | | | | | |
| | | Total | 3 | 671 | | | | | | | | | | | |
| Municipal Total | Urban | 1 | 6,497 | | | | | | | | | | | | |
| | Rural | 7 | 1,570 | | | | | | | | | | | | |
| | Total | 8 | 8,067 | | | | | | | | | | | | |
| Santa Cruz | Sta. Cruz MW | Urban | 2 | 3,475 | SP | No | 4,334 | 850 | 433 | 1 | 11,250 | 2,813 | 1,425 | 2 | |
| | | Rural | 1 | 1,026 | | | | | | | | | | | |
| | | Total | 3 | 4,501 | | | | | | | | | | | |
| Santa Maria | Sta. Maria RWSA | Urban | 1 | 1,883 | DW | No | 2,401 | 455 | 240 | 1 | 3,207 | 802 | 321 | 1 | |
| | | Rural | | | | | | | | | | | | | |
| | | Total | 1 | 1,883 | | | | | | | | | | | |
| Sarangani | Not Applicable | Urban | N.A. | N.A. | N.A. | N.A. | 1,023 | 212 | 112 | 1 | 2,041 | 511 | 204 | 1 | |
| | | Rural | N.A. | N.A. | | | | | | | | | | | |
| | | Total | N.A. | N.A. | | | | | | | | | | | |
| Sulop | Sulop RWSA | Urban | 1 | 900 | DW/SP | No | 1,685 | 342 | 169 | 1 | 3,490 | 873 | 349 | 1 | |
| | | Rural | 4 | 1,000 | | | | | | | | | | | |
| | | Total | 5 | 1,900 | | | | | | | | | | | |
| PW4SP Study Area | Urban | 14 | 70,043 | | | 29,307 | 5,753 | 2,930 | 11 | 73,769 | 18,446 | 7,378 | 19 | | |
| | Rural | 33 | 19,397 | | | | | | | | | | | | |
| | Total | 47 | 89,440 | | | | | | | | | | | | |

Table 8.6.2 Plan for Expansion of Existing Level III Systems

| Name of Municipality | Name of Operating Body | Additional Areas Barangay to be Covered | Additional Population to be Served | Additional Water Sources | |
|----------------------|-------------------------|---|------------------------------------|--------------------------|--------------------------------|
| | | | | Type | Capacity (m ³ /day) |
| Bansalan | Bansalan WD | | | | |
| Digos (Capital) | Digos WD | | | | |
| Hagonoy | Hagonoy WD | | | | |
| | Hagonoy RWSA | | | | |
| | Municipal Total | | | | |
| Kiblawan | Kiblawan WD | | | | |
| Magsaysay | Magsaysay RWSA | | | | |
| | Tacul WWA | | | | |
| | Municipal Total | | | | |
| Malalag | Malalag WWS | | | | |
| Malita | Malita RWSA | | | | |
| Matanao | Manga WWA | | | | |
| | Matanao RWSA | | | | |
| | Municipal Total | | | | |
| Padada | Padada WSC | | | | |
| | Piape RWSA | | | | |
| | Municipal Total | | | | |
| Santa Cruz | Sta. Cruz MW | | | | |
| Santa Maria | Sta. Maria RWSA | | | | |
| Sulop | Sulop RWSA | | | | |
| | PW4SP Study Area | | | | |

Table 8.6.3(a) Rural Water Supply Facilities Required by Target Year

| Name of Municipality | Phase I (2003) Requirements | | | | | | | | | | Phase II (2010) Requirements | | | | | | | | | |
|-----------------------------|-----------------------------|-------------------------|----------------------|------|------|----------------------|-------|----------------------|------|------|------------------------------|-------|----------------------|-----------|-------|----------------------|-------|------|------|-----------|
| | Level II | | | | | Level I | | | | | Level I | | | | | Level I | | | | |
| | Number of System | No. of Communal Faucets | Number of Deep Wells | | | No. of Shallow Wells | Total | Number of Deep Wells | | | No. of Shallow Wells | Total | Number of Deep Wells | | | No. of Shallow Wells | Total | | | |
| | | | 30 m | 50 m | 70 m | | | Sub-total | 30 m | 50 m | | | 70 m | Sub-total | 30 m | | | 50 m | 70 m | Sub-total |
| Bansalan | 4 | 81 | | | 12 | 12 | 11 | 23 | | | | | 123 | 123 | 22 | 245 | | | | |
| Digos (Capital) | 2 | 40 | 8 | | 8 | 8 | 142 | 150 | | | | 124 | 124 | 288 | 412 | | | | | |
| Don Marcelino | | | | | | | | | | | | | 9 | 9 | 152 | 161 | | | | |
| Hagonoy | | | | | | | | | | | | 116 | 116 | 28 | 144 | | | | | |
| Jose Abad Santos (Trinidad) | 2 | 40 | 14 | 14 | 14 | 265 | 64 | 108 | | | | 98 | 98 | 145 | 243 | | | | | |
| Kiblawan | 4 | 81 | 44 | 44 | 44 | 108 | 3 | 22 | | | | 188 | 188 | 47 | 235 | | | | | |
| Magsaysay | 4 | 81 | | | 19 | 19 | 268 | 316 | | | | 159 | 159 | 27 | 186 | | | | | |
| Malalag | | | | | 48 | 48 | | | | | | 65 | 65 | 365 | 430 | | | | | |
| Matnaho | 7 | 141 | | | 36 | 36 | 4 | 40 | | | | 159 | 159 | 105 | 264 | | | | | |
| Padada | | | | | 18 | 18 | 71 | 89 | | | | 81 | 81 | 9 | 90 | | | | | |
| Santa Cruz | 1 | 20 | 103 | 103 | 103 | 121 | 18 | 121 | | | | 199 | 199 | 223 | 279 | | | | | |
| Santa Maria | 2 | 40 | 19 | 19 | 19 | 44 | 63 | 30 | | | | 107 | 107 | 70 | 100 | | | | | |
| Sarangani | 2 | 41 | 27 | 27 | 27 | 30 | 3 | 30 | | | | 107 | 107 | 11 | 118 | | | | | |
| Sulop | | | | | 67 | 67 | 879 | 1,227 | | | | 9 | 873 | 646 | 1,528 | 3,405 | | | | |
| PWASP Study Area | 28 | 565 | 8 | 273 | 67 | 348 | | | | | | | | | | | | | | |

Table 8.6.3(b) Public Facilities Required for Rural Water Supply by Target Year

| Name of Municipality | Phase I (2003) Requirements | | | | | | | | | | Phase II (2010) Requirements | | | | | | | | | | |
|-----------------------------|---|------|----------------------|------|-------------|---|------|--------------------|------|-------------|---|------|----------------------|------|-------------|---|------|--------------------|------|-------------|------|
| | Share of Public Facility (85%) | | | | | Share of Public Facility (85%) | | | | | Share of Public Facility (85%) | | | | | Share of Public Facility (85%) | | | | | |
| | Percentage Allocated to Public Wells (85%) and Percentage Allocated to Public Spring Dev. (15%) | | | | | Percentage Allocated to Public Wells (85%) and Percentage Allocated to Public Spring Dev. (15%) | | | | | Percentage Allocated to Public Wells (85%) and Percentage Allocated to Public Spring Dev. (15%) | | | | | Percentage Allocated to Public Wells (85%) and Percentage Allocated to Public Spring Dev. (15%) | | | | | |
| | Number of Deep Wells | | No. of Shallow Wells | | Grand Total | Number of Deep Wells | | No. of Spring Dev. | | Grand Total | Number of Deep Wells | | No. of Shallow Wells | | Grand Total | Number of Deep Wells | | No. of Spring Dev. | | Grand Total | |
| 30 m | 50 m | 70 m | Sub-total | 30 m | | 50 m | 70 m | Sub-total | 30 m | | 50 m | 70 m | Sub-total | 30 m | | 50 m | 70 m | Sub-total | 30 m | | 50 m |
| Bansalan | | | 9 | 9 | 8 | 17 | 3 | 20 | | | | | 89 | 89 | 31 | 120 | | | | | |
| Digos (Capital) | | | | | 6 | 103 | 109 | 6 | 115 | | | | 90 | 90 | 53 | 168 | | | | | |
| Don Marcelino | 6 | | | | 6 | 103 | 109 | 6 | 115 | | | | 6 | 6 | 21 | 27 | | | | | |
| Hagonoy | | | | | | | | | | | | | 84 | 84 | 18 | 102 | | | | | |
| Jose Abad Santos (Trinidad) | 10 | | | | 181 | 191 | 34 | 225 | | | | | 10 | 10 | 34 | 44 | | | | | |
| Kiblawan | 32 | | | | 46 | 78 | 14 | 92 | | | | | 71 | 71 | 207 | 278 | | | | | |
| Magsaysay | | | | | | | | | | | | | 136 | 136 | 30 | 166 | | | | | |
| Malalag | | | 14 | 14 | 2 | 16 | 3 | 19 | | | | | 114 | 114 | 24 | 138 | | | | | |
| Mahla | 35 | | | | 194 | 229 | 40 | 269 | | | | | 47 | 47 | 55 | 102 | | | | | |
| Matnaho | | | | | | | | | | | | | 114 | 114 | 34 | 148 | | | | | |
| Padada | | | 27 | 27 | 2 | 29 | 5 | 34 | | | | | 59 | 59 | 12 | 71 | | | | | |
| Santa Cruz | 13 | | | | 32 | 65 | 11 | 76 | | | | | 41 | 41 | 361 | 402 | | | | | |
| Santa Maria | 75 | | | | 103 | 88 | 15 | 103 | | | | | 143 | 143 | 30 | 173 | | | | | |
| Sarangani | 14 | | | | 32 | 46 | 8 | 54 | | | | | 22 | 22 | 13 | 35 | | | | | |
| Sulop | 20 | | | | 20 | 22 | 4 | 26 | | | | | 77 | 77 | 15 | 92 | | | | | |
| PWASP Study Area | 6 | 199 | 50 | 255 | 655 | 890 | 156 | 1,046 | | | | | 631 | 466 | 1,103 | 2,457 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

Medium size percussion drilling rig (truck-mounted type for deep well):

Average performance

- 1 well/30 days (5 m/day of drilling rate with finishing work)

Annual accomplishment

- 9 wells/year (365 days/year ÷ 30 days/well x 0.75)

Required number

- 15 sets for the total 693 deep wells

Well rehabilitation equipment:

Average performance

- 1 well/7 days (well redevelopment and finishing work)

Annual accomplishment

- 39 wells/year (365 days/year ÷ 7 days/well x 0.75)

Required number

- 2 sets for 10% of 693 Level I deep wells

Support vehicle:

Type - pick-up truck with winch, double cab

Required number

- 2 units for well rehabilitation

Considering the utilization of existing percussion drilling rig, the following equipment shall be mobilized/procured either by private sector or LGUs to accomplish the physical targets:

- 14 sets of medium size percussion rig for total number of deep wells
- 2 sets of well rehabilitation equipment for 10% of deep wells (at least 1 set shall be held by the provincial government), and
- 2 units of support vehicle for well rehabilitation.

In addition to the above, service trucks equipped with crane are required for each unit of medium size rotary and percussion rigs for hauling drilling tools and water.

8.6.2 Sanitation

Table 8.6.4 Urban Household Toilets Required by Target Year

| Name of Municipality | Phase I (2003) Requirements | | | | | | Phase II (2010) Requirements | | | | | |
|-----------------------------|-----------------------------|-------|-------|-------------------------|-------|-------|------------------------------|-------|--------|-------------------------|-------|--------|
| | Additional HHs to be Served | | | No. of HHs to be Served | | | Additional HHs to be Served | | | No. of HHs to be Served | | |
| | Flush | Pour | Total | Flush | Pour | Total | Flush | Pour | Total | Flush | Pour | Total |
| Bansalan | 261 | 14 | 275 | 261 | 14 | 275 | 394 | 150 | 544 | 394 | 150 | 544 |
| Digos (Capital) | 104 | 559 | 663 | 104 | 559 | 663 | 2,903 | 1,517 | 4,420 | 2,903 | 1,517 | 4,420 |
| Don Marcelino | 453 | 169 | 1,142 | 453 | 169 | 1,142 | 874 | 568 | 1,442 | 874 | 568 | 1,442 |
| Hagonoy | 266 | 188 | 454 | 266 | 188 | 454 | 480 | 265 | 745 | 480 | 265 | 745 |
| Jose Abad Santos (Trinidad) | 184 | 79 | 263 | 184 | 79 | 263 | 334 | 185 | 519 | 334 | 185 | 519 |
| Kiblawan | 237 | 172 | 409 | 237 | 172 | 409 | 427 | 221 | 648 | 427 | 221 | 648 |
| Magaysay | 257 | 130 | 387 | 257 | 130 | 387 | 457 | 262 | 719 | 457 | 262 | 719 |
| Malalag | 179 | 179 | 358 | 179 | 179 | 358 | 309 | 150 | 459 | 309 | 150 | 459 |
| Malita | 421 | 10 | 431 | 421 | 10 | 431 | 820 | 434 | 1,254 | 820 | 434 | 1,254 |
| Matanao | 1 | 206 | 207 | 1 | 206 | 207 | 264 | 135 | 399 | 264 | 135 | 399 |
| Padada | 276 | 488 | 838 | 276 | 488 | 838 | 625 | 344 | 969 | 625 | 344 | 969 |
| Santa Cruz | 681 | 4 | 1,474 | 681 | 4 | 1,474 | 1,454 | 831 | 2,285 | 1,454 | 831 | 2,285 |
| Santa Maria | 243 | 22 | 265 | 243 | 22 | 265 | 450 | 252 | 702 | 450 | 252 | 702 |
| Sarangani | 99 | 41 | 140 | 99 | 41 | 140 | 195 | 123 | 318 | 195 | 123 | 318 |
| Sulop | 132 | 144 | 276 | 132 | 144 | 276 | 347 | 150 | 497 | 347 | 150 | 497 |
| PWASIP Study Area | 3,690 | 2,861 | 7,403 | 3,690 | 2,861 | 7,403 | 10,333 | 5,587 | 15,920 | 10,333 | 5,587 | 15,920 |

Table 8.6.5 Rural Household Toilets Required by Target Year

| Name of Municipality | Phase I (2003) Requirements | | | | | | Phase II (2010) Requirements | | | | | |
|-----------------------------|-----------------------------|--------|--------|-------------------------|--------|--------|------------------------------|--------|--------|-------------------------|--------|--------|
| | Additional HHs to be Served | | | No. of HHs to be Served | | | Additional HHs to be Served | | | No. of HHs to be Served | | |
| | Flush | Pour | Total | Flush | Pour | Total | Flush | Pour | Total | Flush | Pour | Total |
| Bansalan | 330 | 262 | 592 | 330 | 262 | 592 | 712 | 2,291 | 3,003 | 712 | 2,291 | 3,003 |
| Digos (Capital) | 287 | 691 | 978 | 287 | 691 | 978 | 1,316 | 5,004 | 6,320 | 1,316 | 5,004 | 6,320 |
| Don Marcelino | 1,388 | 64 | 1,388 | 1,388 | 64 | 1,388 | 2,356 | 3,504 | 2,356 | 2,356 | 2,356 | 2,356 |
| Hagonoy | 1,125 | 64 | 1,189 | 1,125 | 64 | 1,189 | 3,504 | 3,504 | 3,504 | 3,504 | 3,504 | 3,504 |
| Jose Abad Santos (Trinidad) | 2,187 | 92 | 2,279 | 2,187 | 92 | 2,279 | 3,642 | 3,642 | 3,642 | 3,642 | 3,642 | 3,642 |
| Kiblawan | 1,314 | 1,314 | 2,628 | 1,314 | 1,314 | 2,628 | 3,458 | 3,458 | 3,458 | 3,458 | 3,458 | 3,458 |
| Magaysay | 319 | 1,174 | 1,493 | 319 | 1,174 | 1,493 | 617 | 2,586 | 3,203 | 617 | 2,586 | 3,203 |
| Malalag | 221 | 221 | 442 | 221 | 221 | 442 | 517 | 2,020 | 2,537 | 517 | 2,020 | 2,537 |
| Malita | 406 | 536 | 1,470 | 406 | 536 | 1,470 | 1,246 | 4,365 | 5,611 | 1,246 | 4,365 | 5,611 |
| Matanao | 46 | 1,541 | 1,587 | 46 | 1,541 | 1,587 | 3,704 | 3,704 | 3,704 | 3,704 | 3,704 | 3,704 |
| Padada | 93 | 323 | 416 | 93 | 323 | 416 | 246 | 843 | 1,089 | 246 | 843 | 1,089 |
| Santa Cruz | 325 | 722 | 1,047 | 325 | 722 | 1,047 | 628 | 3,083 | 3,711 | 628 | 3,083 | 3,711 |
| Santa Maria | 1,036 | 1,472 | 2,508 | 1,036 | 1,472 | 2,508 | 3,295 | 3,295 | 3,295 | 3,295 | 3,295 | 3,295 |
| Sarangani | 175 | 1,603 | 1,778 | 175 | 1,603 | 1,778 | 342 | 1,117 | 1,459 | 342 | 1,117 | 1,459 |
| Sulop | 2,202 | 14,098 | 18,260 | 2,202 | 14,098 | 18,260 | 5,624 | 42,763 | 48,387 | 5,624 | 42,763 | 48,387 |
| PWASIP Study Area | 2,202 | 14,098 | 18,260 | 2,202 | 14,098 | 18,260 | 5,624 | 42,763 | 48,387 | 5,624 | 42,763 | 48,387 |

Table 8.6.6 Public School Toilets Required by Target Year

| Name of Municipality | Phase I (2003) Requirements | | | Phase II (2010) Requirements | | |
|-----------------------------|--|--------------------|--------------------------|--|--------------------|--------------------------|
| | Additional Public School Students to be Served | No. of Toilet Unit | No. of Toilet Facilities | Additional Public School Students to be Served | No. of Toilet Unit | No. of Toilet Facilities |
| Bansalan | 3,284 | 83 | 17 | 3,096 | 78 | 16 |
| Digos (Capital) | 12,587 | 315 | 63 | 8,987 | 225 | 45 |
| Don Marcelino | 1,485 | 38 | 8 | 2,663 | 67 | 14 |
| Hagonoy | 3,136 | 79 | 16 | 3,530 | 89 | 18 |
| Jose Abad Santos (Trinidad) | 1,650 | 42 | 9 | 2,462 | 62 | 13 |
| Kiblawan | 2,518 | 63 | 13 | 3,063 | 77 | 16 |
| Magsaysay | 3,364 | 85 | 17 | 3,578 | 90 | 18 |
| Malalag | 2,106 | 53 | 11 | 2,552 | 64 | 13 |
| Malita | 2,505 | 63 | 13 | 5,259 | 132 | 27 |
| Matanao | 2,770 | 70 | 14 | 3,388 | 85 | 17 |
| Padada | 1,054 | 27 | 6 | 1,616 | 41 | 9 |
| Santa Cruz | 4,574 | 115 | 23 | 5,083 | 128 | 26 |
| Santa Maria | 1,484 | 38 | 8 | 3,678 | 92 | 19 |
| Sarangani | 1,631 | 41 | 9 | 2,222 | 56 | 12 |
| Sulop | 508 | 13 | 3 | 1,258 | 32 | 7 |
| PW4SP Study Area | 44,656 | 1,125 | 230 | 52,435 | 1,318 | 270 |

Table 8.6.7 Public Toilets Required by Target Year

| Name of Municipality | Phase I (2003) Requirements | | | | Phase II (2010) Requirements | | | |
|-----------------------------|-----------------------------|----------------------|------------------|-----------|------------------------------|----------------------|------------------|----------|
| | Number of Public Toilets | | | | Number of Public Toilets | | | |
| | Public Market | Bus/Jeepney Terminal | Parks/Playground | Total | Public Market | Bus/Jeepney Terminal | Parks/Playground | Total |
| Bansalan | | 1 | | 1 | 1 | | | 1 |
| Digos (Capital) | | 2 | | 2 | 2 | | | 2 |
| Don Marcelino | | 1 | | 1 | | | | |
| Hagonoy | | 1 | | 1 | 1 | | | 1 |
| Jose Abad Santos (Trinidad) | | | | | | | | |
| Kiblawan | | 1 | | 1 | | | | |
| Magsaysay | | 1 | | 1 | | | | |
| Malalag | | 1 | | 1 | | | | |
| Malita | 2 | 1 | | 3 | 2 | | | 2 |
| Matanao | 4 | 1 | | 5 | | | | |
| Padada | | 1 | | 1 | 1 | | | 1 |
| Santa Cruz | 1 | 1 | | 2 | | | | |
| Santa Maria | 1 | 1 | | 2 | | | | |
| Sarangani | | | | | 1 | | | 1 |
| Sulop | | 1 | | 1 | | | | |
| PW4SP Study Area | 8 | 14 | | 22 | 8 | | | 8 |