

資 料

資料II-2-1 PMRCのサンプル・サーベイ (1986)

Sample, Population

| | |
|---------------------------|----------------|
| Houses visited | 489 |
| Houses contacted | 338 |
| Total population examined | 2008 |
| Total males | 919 - (46.0%) |
| Total females | 1089 - (54.0%) |
| Family size | 7.9 |

資料II-2-2 PMRCのサンプル・サーベイ (1986)

有病者数

| | |
|---------------------------|---------------------|
| Total diseased population | = 1235/2008 (61.5%) |
| Total diseased males | = 506/919 (55.1%) |
| Total diseased females | = 729/1089 (66.9%) |

資料II-2-3 PMRCのサンプル・サーベイ (1986)

有病者数 (男子)

| | | |
|---------------------------------------|-------|-------|
| Total diseased male | = 506 | |
| Suffering from single disease | = 334 | (66%) |
| Suffering from double disease | = 142 | (29%) |
| Suffering from more than two diseases | = 30 | (6%) |

資料II-2-4 PMRCのサンプル・サーベイ (1986)

疾病別・男子有病者数と構成割合 (単一疾患)

| | | |
|---------------------------------|-----|---------|
| Respiratory diseases | 129 | (38.6%) |
| Gastrointestinal disease | 112 | (33.5%) |
| Miscellaneous group | 31 | (9.3%) |
| Skin diseases | 22 | (6.6%) |
| Eye diseases | 19 | (5.7%) |
| Cardiovascular diseases | 7 | (2.1%) |
| Genitourinary tract diseases | 7 | (2.1%) |
| Infectious diseases | 3 | (0.9%) |
| Bones and joints diseases | 3 | (0.9%) |
| Haematology (Anaemia) | 1 | (0.3%) |
| Central nervous system diseases | 0 | (0.0%) |

資料II-2-5 PMRCのサンプル・サーベイ (1986)

有病者数 (女子)

| | | | |
|---------------------------------------|---|-----|-------|
| Total diseased female | = | 729 | |
| Suffering from single disease | = | 416 | (57%) |
| Suffering from double disease | = | 238 | (33%) |
| Suffering from more than two diseases | = | 75 | (10%) |

資料Ⅱ-2-6 PMRCのサンプル・サーベイ (1986)

疾病別・女子有病者数と構成割合 (単一疾患)

| | | |
|---------------------------------|-----|---------|
| Respiratory diseases | 130 | (31.2%) |
| Gastro intestinal diseases | 95 | (22.8%) |
| Haematology (Anaemias) | 50 | (12.0%) |
| Miscellaneous group | 44 | (10.6%) |
| Gynaecological problems | 26 | (6.2%) |
| Skin diseases | 18 | (4.3%) |
| Eye diseases | 16 | (3.8%) |
| Bones and joints disease | 13 | (3.1%) |
| Infectious diseases | 10 | (2.4%) |
| Cardiovascular diseases | 9 | (2.2%) |
| Genitourinary tract diseases | 5 | (1.2%) |
| Central nervous system diseases | 0 | (0.0%) |

以上全て (資料Ⅱ-2-1~6)

Source: A. Kazmi et al. A Study on Illness in an Urban Area, Karachi :
Proceedings of the PMRC Medical Research Congress 1986

資料 II - 2 - 7 Health Care Financing & Expenditure Study (1987)

Sample Population

| Age | Numbers | | Persons | Sex Ratio | Percentage | |
|-------|---------|---------|---------|-----------|------------|---------|
| | Males | Females | | | Males | Females |
| 0-4 | 4,992 | 4,428 | 9,420 | 113 | 15.296 | 15.959 |
| 5-9 | 5,309 | 4,628 | 9,937 | 115 | 16.267 | 16.679 |
| 10-14 | 4,079 | 3,421 | 7,500 | 119 | 12.498 | 12.329 |
| 15-19 | 3,338 | 2,550 | 5,888 | 131 | 10.228 | 9.190 |
| 20-24 | 2,866 | 2,331 | 5,197 | 123 | 8.781 | 8.401 |
| 25-29 | 2,201 | 1,959 | 4,160 | 112 | 6.744 | 7.060 |
| 30-34 | 1,707 | 1,729 | 3,436 | 99 | 5.230 | 6.231 |
| 35-39 | 1,571 | 1,370 | 2,941 | 115 | 4.814 | 4.938 |
| 40-44 | 1,430 | 1,443 | 2,873 | 99 | 4.382 | 5.201 |
| 45-49 | 1,239 | 1,025 | 2,264 | 121 | 3.796 | 3.694 |
| 50-54 | 1,098 | 984 | 2,082 | 112 | 3.364 | 3.546 |
| 55-59 | 666 | 556 | 1,222 | 120 | 2.041 | 2.004 |
| 60-64 | 915 | 620 | 1,535 | 148 | 2.804 | 2.235 |
| 65-69 | 411 | 275 | 686 | 149 | 1.259 | 0.991 |
| 70-74 | 458 | 239 | 697 | 192 | 1.403 | 0.861 |
| 75+ | 357 | 189 | 546 | 189 | 1.093 | 0.681 |
| TOTAL | 32,637 | 27,747 | 60,384 | 118 | 100 | 100 |

Sex rate : at age 0-1 years = 121
 : at age 1-5 years = 112

資料II - 2 - 8 Health Care Financing & Expenditure Study (1987)

男女別・年齢階級別・居住地域別有病率

| Age Group | 2 Week Sick Prevalence Per 1000 All Areas | | 2 Week Sick Prevalence Urban | | 2 Week Sick Prevalence Rural | |
|-----------|---|-----|------------------------------|-----|------------------------------|-----|
| | M | F | M | F | M | F |
| | 0-4 | 129 | 128 | 120 | 126 | 134 |
| 5-9 | 60 | 59 | 64 | 62 | 58 | 58 |
| 10-14 | 56 | 62 | 58 | 59 | 55 | 64 |
| 15-19 | 48 | 71 | 49 | 64 | 48 | 76 |
| 20-24 | 59 | 76 | 61 | 64 | 58 | 83 |
| 25-29 | 51 | 89 | 49 | 87 | 52 | 90 |
| 30-34 | 62 | 89 | 74 | 79 | 55 | 94 |
| 35-39 | 53 | 122 | 58 | 149 | 50 | 107 |
| 40-44 | 85 | 132 | 87 | 136 | 84 | 130 |
| 45-49 | 107 | 175 | 119 | 167 | 100 | 179 |
| 50-54 | 150 | 210 | 136 | 209 | 158 | 211 |
| 55-59 | 156 | 236 | 171 | 213 | 147 | 247 |
| 60-64 | 223 | 206 | 224 | 232 | 222 | 191 |
| 65-69 | 243 | 287 | 285 | 326 | 219 | 269 |
| 70-74 | 284 | 259 | 265 | 286 | 293 | 247 |
| 75+ | 356 | 344 | 327 | 377 | 367 | 331 |
| ALL AGES | 89 | 106 | 87 | 104 | 90 | 108 |

資料II - 2 - 7 ~ 8 は全て

Source: Health Care Financing & Expenditure Study (MPD, 1987)

資料II-3-1 州別・行政管理区分

Administrative Units Per Province

| Administrative Units | Punjab | Sind | NWFP | Baluch-istan | Federal Capital | FATA | N.As. | AJK | Total |
|----------------------|--------|-------|-------|--------------|-----------------|------|-------|-------|--------|
| Provinces | 1 | 1 | 1 | 1 | - | - | - | - | 4 |
| Divisions | 8 | 3 | 5 | 4 | - | - | - | - | 20 |
| Districts | 29 | 15 | 13 | 17 | 1 | 11 | 3 | 4 | 92 |
| Union Councils | 2,367 | 572 | 562 | 315 | 11 | 6 | 105 | 180 | 4,112 |
| Villages | 25,079 | 5,540 | 8,203 | 5,761 | 201 | 308 | 320 | 1,644 | 46,594 |

Source : Rural Health Programme of Pakistan (MPD)

資料II-3-2 第6次5ヶ年計画・達成内容(1988年)

| Facility | Target | Achievement | % Achievement |
|--|--------|-------------|---------------|
| Doctors Residences at existing BHU | 1715 | 1715 | 100 |
| BHUs | 2600 | 1803 | 69 |
| RHCs | 355 | 194 | 55 |
| Teaching Beds | 3500 | 3500 | 100 |
| Hospital beds in DHQ and THQ Hospitals | 4700 | 5149 | 110 |

Source : 第7次5ヶ年計画

資料 11-3-3 パキスタンの医科大学と教育病院

LIST OF MEDICAL COLLEGES/INSTITUTIONS IN PAKISTAN ALONGWITH THE ATTACHED TEACHING HOSPITALS.

| S. NO. NAME OF MEDICAL COLLEGES (FOR MBBS DEGREE.) | ATTACHED TEACHING HOSPITALS : | S. NO. NAME OF MEDICAL COLLEGES (FOR MBBS DEGREE.) | ATTACHED TEACHING HOSPITALS : |
|---|--|---|--|
| 1. King Edward Medical College, Lahore. | (i) Lady Willington Hospital Lahore. | 8. Army Medical College, Rawalpindi. | (i) M. H. & C. M. H. Rawalpindi. |
| | (ii) Mayo Hospital, Lahore. | 9. Dow Medical College, Karachi. | (i) Civil Hospital, Karachi. |
| | (iii) Lahore General Hospital Lahore. | 10. Liaquat Medical College/College, Jamschoro. | (ii) Liaquat Medical College/Hospital Jamschoro/Hyd. |
| 2. Fatima Jinnah Medical College or Woman, Lahore. | (i) Sir Ganga Ram Hospital Lahore. | 11. Chandka Medical College, Larkana. | (i) Civil Hospital, Larkana. |
| | (ii) Gulab Devi Hospital, Lahore. | | (ii) Zaid-bin-Sultan-Al-Nayan Hospital Larkana. |
| 3. Nishtar Medical College, Multan. | (i) Nishtar Medical College/Hospital, Multan. | 12. Nawabshah Medical College for women, Nawabshah. | Nawabshah Medical Hospital, Nawabshah. |
| 4. Rawalpindi Medical College, Rawalpindi. | (i) Holy Family Hospital, Rawalpindi. | 13. Sind Medical College, Karachi. | (i) Jinnah Hospital, Karachi. |
| | (ii) Distt. Headquarter Hospital, Rawalpindi. | 14. *The Aga Khan Medical College, Karachi. | (i) Aga Khan Hospital, Karachi. |
| | (iii) Rawalpindi General Hospital, Rawalpindi. | 15. Khyber Medical College, Peshawar. | (i) Khyber teaching hospital, Peshawar. |
| 5. Punjab Medical College Faisalabad. | (i) Punjab Medical College Hospital. | 16. Ayub Medical College, Abbottabad. | (i) District Headquarter Hospital Abbottabad. |
| 6. Allama Iqbal Medical College, Lahore. | (i) Services Hospital, Lahore. | 17. Bolan Medical College, Quetta. | (i) Sandeman Civil Hospital, Quetta. |
| 7. Quaid-e-Azam Medical College, Bahawalpur. | (i) B. V. Hospital, Bahawalpur. | | |

*The Students of this College have reached upto 4th year.

注) No. 14 のみ私立校, 他は公立。 Source : from PMDC

資料II-3-4 パキスタンの大学 (University)

LIST OF RECOGNISED UNIVERSITIES/EXAMINING BODIES IN PAKISTAN(WITH MEDICAL FACULTY).

-
1. University of Punjab, Lahore.
 2. University of Karachi, Karachi.
 3. University of Sind, Jamshoro/Hyderabad.
 4. University of Baluchistan, Quetta.
 5. University of Peshawar, Peshawar.
 6. Bahauddin Zakaria University, Multan.
 7. Isramia University, Bahawalpur.
 8. Quaid-e-Azem University, Islamabad.
 9. Aga Khan University of Health Sciences, Karachi.
 10. *College of Physicians & Surgeons, Pakistan 7th Central Street, Defence Housing Authority, Karachi.
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*Examining Body for F. C. P. S. and M. C. P. S. only.
Source: from PMDC

資料II-3-5 パキスタンの卒後研修校

POSTGRADUATE MEDICAL INSTITUTES (FOR POSTGRADUATE QUALIFICATION LIKE
F. C. P. S., M. C. P. S., M. D., M. S., D. P. H. ETC.)

-
- | | |
|--|--|
| 1. Jinnah Postgraduate Medical Centre, Karachi. | Jinnah Hospital, Karachi. |
| 2. Postgraduate Medical Institute, Lahore. | Mayo Hospital, Lahore. |
| 3. College of Community Medicine, Lahore. (Previously Known as Institute of Hygiene Preventive Medicine). | Selected Communities (For D. P. H. only). |
| 4. Ojha Institute of Tuberculosis and Chest Diseases, University Road, Karachi. | Ojha Sanatorium, Karachi. |
| 5. Armed Forces Medical College, Rawalpindi. | C. M. H. Rawalpindi. |
| 6. Postgraduate Medical Institute, Peshawar. | Lady Reading Hospital, Peshawar. |
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Source: from PMDC

資料II-3-6 パキスタンの歯科大学

DENTAL COLLEGES(FOR B. D. S. COURSE.)

| | | |
|----|--|---|
| 1. | de Montmorency College of Dentistry, Ravi Road, Lahore. | Punjab Dental Hospital, Lahore. |
| 2. | Dental Section, Khyber Medical College, Peshawar. | Dental Hospital, Peshawar. |
| 3. | Dental Section, Liaquat Medical College, Jamshoro/ Hyderabad. | Liaquat Medical College/Hospital Jamshoro/Hyderabad. |
| 4. | Dental Section, Nishtar Medical College. | Nishtar Medical College/Hospital Multan. |

Source:from PMDC

資料III-4-1 パンジャブ州のPHC施設 (1986)

DISTRICT-WISE NUMBER OF UNION COUNCILS WITH HEALTH FACILITIES AS OF JUNE, 1986
PUNJAB

| Name of the District | No. of Union Councils Where, CH, RHC or BHU is | | % of Union Councils Where, CH, RHC or BHU is available | No. of Union Councils Where, CH, RHC or BHU is | | % of Union Councils Where, CH, RHC or BHU is available | | |
|----------------------|--|---------------|--|--|---------------|--|-----|----|
| | Available | Not available | | Available | Not available | | | |
| 1. Attock | 56 | 42 | 14 | 75 | 97 | 69 | 28 | 71 |
| 2. Rawalpindi | 93 | 76 | 17 | 82 | 34 | 19 | 15 | 56 |
| 3. Jhelum | 38 | 29 | 9 | 76 | 37 | 27 | 8 | 77 |
| 4. Chakwal | 58 | 47 | 11 | 81 | 121 | 80 | 41 | 66 |
| 5. Gujrat | 140 | 103 | 37 | 74 | 120 | 88 | 32 | 73 |
| 6. Gujranwala | 112 | 79 | 33 | 71 | 71 | 58 | 13 | 82 |
| 7. Sialkot | 149 | 114 | 35 | 77 | 76 | 54 | 22 | 71 |
| 8. Lahore | 38 | 26 | 12 | 68 | 50 | 44 | 6 | 88 |
| 9. Sheikhpura | 122 | 78 | 44 | 64 | 81 | 69 | 12 | 85 |
| 10. Kasur | 83 | 62 | 21 | 75 | 35 | 28 | 7 | 80 |
| 11. Okara | 89 | 60 | 29 | 67 | 38 | 26 | 12 | 68 |
| 12. Faisalabad | 163 | 118 | 45 | 72 | 75 | 52 | 23 | 69 |
| 13. Jhang | 100 | 76 | 24 | 76 | 95 | 61 | 34 | 64 |
| 14. Toba Tek Singh | 64 | 55 | 9 | 86 | 98 | 70 | 28 | 71 |
| 15. Mianwali | 37 | 29 | 8 | 78 | | | | |
| Total | | | | | 2367 | 1738 | 629 | 73 |

Source: (資料III-4-1~5) Atlas of Health Facilities of Pakistan (Health Sector, Planning and Development Division)

資料Ⅲ-4-2 シンド州のPHC施設(1986)

DISTRICT-WISE NUMBER OF UNION COUNCILS WITH
HEALTH FACILITIES AS OF JUNE, 1986

S I N D

| Name of the District | No. of Union Councils | No. of Union Councils Where, CH, RHC or BHU is | | % of Union Councils Where, CH, RHC or BHU is available |
|----------------------|-----------------------|--|---------------|--|
| | | Available | Not available | |
| 1. Hyderabad | 46 | 20 | 26 | 43 |
| 2. Thatta | 49 | 22 | 27 | 45 |
| 3. Badin | 35 | 20 | 15 | 57 |
| 4. Tharparker | 74 | 28 | 46 | 38 |
| 5. Sanghar | 38 | 23 | 15 | 61 |
| 6. Dadu | 45 | 18 | 27 | 40 |
| 7. Nawabshah | 60 | 24 | 36 | 40 |
| 8. Khairpur | 46 | 17 | 29 | 37 |
| 9. Sukkar | 40 | 20 | 20 | 50 |
| 10. Shikarpur | 32 | 15 | 17 | 47 |
| 11. Jacobabad | 43 | 16 | 27 | 37 |
| 12. Larkana | 53 | 16 | 37 | 30 |
| 13. Karachi | 11 | 5 | 6 | 45 |
| Total | 572 | 244 | 328 | 43 |

資料Ⅲ - 4 - 3 北西辺境州のPHC施設 (1986)

DISTRICT-WISE NUMBER OF UNION COUNCILS WITH
HEALTH FACILITIES AS OF JUNE, 1986

N. W. F. P.

| Name of the District | No. of Union Councils | No. of Union Councils Where, CH, RHC or BHU is | | % of Union Councils Where, CH, RHC or BHU is available |
|-------------------------|--------------------------|---|---------------|---|
| | | Available | Not available | |
| 1. Peshawar | 84 | 46 | 38 | 55 |
| 2. Mardan | 79 | 35 | 44 | 44 |
| 3. Kohat | 24 | 14 | 10 | 58 |
| 4. Karak | 17 | 14 | 3 | 82 |
| 5. Abbottabad | 70 | 45 | 25 | 64 |
| 6. Mansehra | 62 | 48 | 14 | 77 |
| 7. Kohistan | 30 | 20 | 10 | 67 |
| 8. Bannu | 37 | 28 | 9 | 76 |
| 9. D. I. Khan | 31 | 24 | 7 | 77 |
| 10. Chitral | 10 | 10 | — | 100 |
| 11. Dir | 35 | 31 | 4 | 89 |
| 12. Swat | 66 | 50 | 16 | 76 |
| 13. Malakand Agency | 17 | 13 | 4 | 76 |
| Total | 562 | 378 | 184 | 67 |

資料III-4-4 バルチスタン州のPHC施設(1986)

DISTRICT-WISE NUMBER OF UNION COUNCILS WITH
HEALTH FACILITIES AS OF JUNE, 1986

BALUCHISTAN

| Name of the District | No. of Union Councils | No. of Union Councils Where, CH, RHC or BHU is | | % of Union Councils Where, CH, RHC or BHU is available |
|-------------------------|--------------------------|---|---------------|---|
| | | Available | Not available | |
| 1. Quetta | 8 | 6 | 2 | 75 |
| 2. Pishin | 31 | 15 | 16 | 48 |
| 3. Loralai | 35 | 14 | 21 | 40 |
| 4. Zhob | 28 | 9 | 19 | 32 |
| 5. Chagai | 12 | 10 | 2 | 83 |
| 6. Sibi | 15 | 10 | 5 | 67 |
| 7. Kohlu | 9 | 8 | 1 | 89 |
| 8. Kachhi | 28 | 13 | 15 | 46 |
| 9. Dera Bughti | 10 | 8 | 2 | 80 |
| 10. Nasirabad | 37 | 12 | 25 | 32 |
| 11. Kalat | 19 | 8 | 11 | 42 |
| 12. Khuzdar | 22 | 9 | 13 | 41 |
| 13. Kharan | 10 | 6 | 4 | 60 |
| 14. Lasbela | 13 | 10 | 3 | 77 |
| 15. Turbat | 21 | 13 | 8 | 62 |
| 16. Panjgur | 11 | 7 | 4 | 64 |
| 17. Gwadur | 6 | 6 | — | 100 |
| Total | 315 | 164 | 151 | 52 |

資料 III - 4 - 5 連邦政府直轄地域の PHC 施設 (1986)

SPECIAL AREAS

DISTRICT-WISE NUMBER OF UNION COUNCILS WITH HEALTH FACILITIES AS JUNE, 1986

AZAD KASHMIR

NOTHERN AREAS

| Name of the District | No. of Union Councils Where, CH, RHC or BHU is Available | | % of Union Councils Where, CH, RHC or BHU is available | | Name of the District | No. of Union Councils Where, CH, RHC or BHU is Available | | % of Union Councils Where, CH, RHC or BHU is available | |
|----------------------|--|---------------|--|---------------|----------------------|--|---------------|--|---------------|
| | Available | Not available | Available | Not available | | Available | Not available | Available | Not available |
| Muzaffarabad | 47 | 42 | 6 | 89 | Gilgit | 40 | 33 | 7 | 82 |
| Poonch | 60 | 54 | 5 | 90 | Baltistan | 46 | 37 | 9 | 80 |
| Mirpur | 39 | 36 | 3 | 92 | Diamer | 19 | 12 | 7 | 63 |
| Kotli | 34 | 31 | 3 | 91 | Total | 105 | 82 | 23 | 78 |
| Total | 180 | 163 | 17 | 91 | | | | | |

ISLAMABAD

Capital Territory

| Name of the District | No. of Union Councils Where, CH, RHC or BHU is Available | | % of Union Councils Where, CH, RHC or BHU is available | |
|----------------------|--|---------------|--|---------------|
| | Available | Not available | Available | Not available |
| Islamabad | 11 | 9 | 2 | 82 |

資料Ⅲ - 5 - 1 第7次5ヶ年計画, 事業年度別・開発予算案

EXPENDITURE ON PRINCIPAL COMPONENTS OF THE PROGRAMME(1988・93)

(Million Rupees)

| Programme | 1988・89 | 1989・90 | 1990・91 | 1991・92 | 1992・93 | Total |
|--------------------------------------|---------|---------|---------|---------|---------|-------|
| Preventive programmes | 252 | 205 | 194 | 183 | 180 | 1014 |
| Rural Health | 1372 | 1335 | 1051 | 960 | 952 | 5670 |
| Hospital Beds | 502 | 574 | 635 | 722 | 743 | 3176 |
| Urban Health Centres | 52 | 69 | 265 | 282 | 283 | 951 |
| Health Manpower Development | 483 | 513 | 536 | 554 | 559 | 2645 |
| Nutrition Programmes | 26 | 35 | 44 | 53 | 54 | 212 |
| Medical Rehabilitation | 12 | 32 | 22 | 42 | 62 | 170 |
| Traditional Medicine and Homoeopathy | 18 | 27 | 47 | 45 | 51 | 188 |
| Miscellaneous | 23 | 14 | 22 | 35 | 40 | 134 |
| Total | 2740 | 2804 | 2816 | 2876 | 2924 | 14160 |

Source : 第7次5ヶ年計画 (資料Ⅲ - 5 - 1 ~ 5)

資料 III - 5 - 2 第 7 次 5 ヶ年計画, 事業主体別・事業年度別・開発予算案

(継続事業および新規事業)

| | | THROWFORWARD/ON・GOING AND NEW PROJECTS | | | | | (Million Rs) |
|-----------------------|--|--|---------|---------|---------|---------|-------------------|
| Administrative Agency | | 1988・89 | 1989・90 | 1990・91 | 1991・92 | 1992・93 | Total Plan Period |
| | | <u>THROWFORWARD/ON・GOING PROJECTS</u> | | | | | |
| A. FEDERAL | | | | | | | |
| 1. Health Division | | 464 | 395 | 346 | 263 | 266 | 1,734 |
| 2. Azed Kashmir | | 52 | 43 | 35 | 9 | | 139 |
| 3. Northern Area | | 15 | 13 | 14 | 17 | 17 | 76 |
| 4. Planning Division | | 5 | 7 | 7 | 8 | 8 | 35 |
| 5. I. C. T. | | 9 | 12 | 3 | • | • | 24 |
| 6. FATA | | 10 | 10 | 4 | • | • | 24 |
| TOTAL | | 555 | 480 | 409 | 297 | 291 | 2,032 |
| B. PROVINCIAL | | | | | | | |
| 1. Punjab | | 416 | 421 | 243 | 253 | 223 | 1,556 |
| 2. Sind | | 407 | 196 | 164 | 123 | 141 | 1,031 |
| 3. NWFP | | 150 | 95 | 44 | 17 | 6 | 312 |
| 4. Baluchistan | | 40 | 36 | 31 | 7 | • | 114 |
| TOTAL | | 1,013 | 748 | 482 | 400 | 370 | 3,013 |
| Grand Total | | 1,568 | 1,228 | 891 | 697 | 661 | 5,045 |
| | | <u>NEW PROJECTS</u> | | | | | |
| A. FEDERAL | | 85 | 173 | 244 | 357 | 369 | 1,228 |
| B. PROVINCIAL | | | | | | | |
| 1. Punjab | | 698 | 709 | 880 | 895 | 951 | 4,133 |
| 2. Sind | | 50 | 255 | 292 | 337 | 324 | 1,258 |
| 3. NWFP | | 201 | 267 | 331 | 365 | 384 | 1,548 |
| 4. Baluchistan | | 138 | 172 | 179 | 224 | 235 | 948 |
| TOTAL NEW PROJECTS | | 1,172 | 1,576 | 1,926 | 2,178 | 2,263 | 9,115 |
| | | <u>TOTAL ON・GOING AND NEW PROJECTS</u> | | | | | |
| A. FEDERAL | | 640 | 653 | 652 | 655 | 660 | 3,260 |
| B. PROVINCIAL | | | | | | | |
| 1. Punjab | | 1,114 | 1,130 | 1,123 | 1,148 | 1,174 | 5,689 |
| 2. Sind | | 457 | 451 | 456 | 460 | 465 | 2,289 |
| 3. NWFP | | 351 | 362 | 375 | 382 | 390 | 1,860 |
| 4. Baluchistan | | 178 | 208 | 210 | 231 | 235 | 1,062 |
| GRAND TOTAL | | 2,740 | 2,805 | 2,817 | 2,876 | 2,924 | 14,160 |

資料 III - 5 - 3 第 7 次 5 ヶ年計画, 事業主体別・事業年度別・開発予算案

YEARWISE・AGENCY-WISE ALLOCATION FOR SEVENTH PLAN

(Million Rupees)

| Agency | 1988・89 | 1989・90 | 1990・91 | 1991・92 | 1992・93 | Total |
|--------------------|---------------|---------------|---------------|---------------|---------------|----------------|
| FEDERAL | | | | | | |
| Health Division | 466.6 | 467 | 466 | 463 | 466 | 2328.6 |
| Northern Areas | 25.3 | 26.3 | 28.4 | 32.5 | 32.5 | 145 |
| Azad Kashmir | 80.5 | 84 | 88 | 90 | 91 | 433.5 |
| FATA | 47 | 47 | 50 | 50 | 50 | 244 |
| I. C. T. | 9.5 | 12 | 3 | • | • | 24.5 |
| Planning Division | 11.5 | 17 | 17 | 19 | 20 | 84.5 |
| TOTAL | 640.4 | 653.3 | 652.4 | 654.5 | 659.5 | 3260.1 |
| PROVINCIAL | | | | | | |
| Punjab | 1113.8 | 1129.8 | 1123.2 | 1148.1 | 1174.2 | 5689.1 |
| Sind | 456.9 | 451 | 456 | 460 | 465 | 2288.9 |
| NWFP | 350.8 | 362.4 | 375 | 382 | 390 | 1860.2 |
| Baluchistan | 177.8 | 208 | 210 | 231 | 235 | 1061.8 |
| TOTAL | 2099.3 | 2151.2 | 2164.2 | 2221.1 | 2264.2 | 10900 |
| GRAND TOTAL | 2739.7 | 2804.5 | 2816.6 | 2875.6 | 2923.7 | 14160.1 |

資料Ⅲ-5-4 第7次5ヶ年計画, 1992-93年度: 非開発事業予算案

| CATEGORY | Million Rs. |
|--|---------------|
| BHU (5409) | 2,705 |
| RHC (625) | 938 |
| Urban Health Centres(314) | 314 |
| Other primary health care facilities. | 1,000 |
| Hospital beds: | |
| Teaching:15,000 | 1,500 |
| Non-teaching 20,000 | 1,000 |
| Teaching Institutions: (Medical Colleges, Nursing Schools, and Schools of Paramedics) | 1,000 |
| Chemicals and supplies: | 1,000 |
| Contingencies: | 1,185 |
| Total | 10,642 |

資料Ⅲ-5-5 第7次5ヶ年計画, 事業主体別・事業年度別・非開発事業予算案

AGENCY-WISE NON-DEVELOPMENT FINANCIAL ESTIMATES(1988-93)

(Million Rupees)

| Agency | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | Total |
|-------------------|--------------|--------------|--------------|--------------|---------------|---------------|
| <u>FEDERAL</u> | 800 | 886 | 964 | 1,120 | 1,392 | 5,162 |
| <u>PROVINCIAL</u> | | | | | | |
| Punjab | 1,950 | 2,350 | 2,876 | 3,670 | 4,700 | 15,546 |
| Sind | 870 | 1,035 | 1,200 | 1,550 | 1,900 | 6,555 |
| NWFP | 700 | 825 | 1,050 | 1,350 | 1,650 | 5,575 |
| Baluchistan | 400 | 488 | 630 | 775 | 1,000 | 3,293 |
| TOTAL | 4,720 | 5,584 | 6,720 | 8,465 | 10,642 | 36,131 |

資料Ⅲ - 5 - 6 BHU/RHC整備計画 - 1986年の現状

PROVINCE-WISE NUMBER OF UNION COUNCILS WITH HEALTH FACILITIES AVAILABLE

| Name of the Province | No. of Union Councils | Union councils Where, BHU/RHC/CH* | Union councils Without BHU/RHC/CH* | % of Union Councils Served |
|-------------------------------|-----------------------|-----------------------------------|------------------------------------|----------------------------|
| Punjab | 2367 | 1744 | 623 | 74 |
| Sind | 572 | 251 | 321 | 44 |
| NWFP | 562 | 378 | 184 | 67 |
| Baluchistan | 315 | 164 | 151 | 52 |
| Azad Kashmir | 180 | 167 | 13 | 93 |
| Northern Areas | 105 | 82 | 23 | 78 |
| Islamabad (Federal Territory) | 11 | 9 | 2 | 82 |
| Total | 4112 | 2795 | 1317 | 68 |

* CH : Civil Hospital

Source : Rural Health Programme of Pakistan (資料Ⅲ - 5 - 6 ~ 7)

資料Ⅲ - 5 - 7 BHU/RHC整備計画 - 州別・年次別予算配分

(Million Rs)

| Province/Region | 1986-87 | 1987-88 | 1988-89 | 1989-90 | Total |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Punjab | 596 | 700 | 800 | 865 | 2961 |
| Sind | 210 | 372 | 432 | 340 | 1355 |
| NWFP | 188 | 334 | 479 | 205 | 1206 |
| Baluchistan | 46 | 75 | 140 | 259 | 520 |
| Federally Administered Tribal Areas | 36 | 44 | 48 | 29 | 157 |
| Azad Jammu and Kashmir | 40 | 65 | 85 | 90 | 280 |
| Northern Areas | 10 | 12 | 13 | 16 | 51 |
| Capital Territory of Islamabad | 9 | 10 | 10 | - | 29 |
| Total | 1135 | 1613 | 2007 | 1804 | 6559 |

資料III-5-8 BHU/RHC整備計画～費用見積

ASSUMPTIONS FOR COST ESTIMATES

| Item | Cost(Million Rs.) | | |
|--|-------------------|---|-------|
| (1) Basic Health Unit(BHU) | | (4) Residence for Paramedic | |
| (i) BHU building 2500 sft @250 Rs. per sft. | 0.625 | (i) Residence building 606 sft @ Rs. 250 per sft. | 0.152 |
| (ii) Boundry wall @ Rs. 100 per Rft including gate. | 0.125 | (ii) Compound wall | 0.010 |
| (iii) Tubewell/well and overhead reservior. | 0.100 | (iii) 5% contingencies. | 0.008 |
| (iv) WAPDA charges for external electrification. | 0.050 | (iv) 6-1/2% departmental charges of PED. | 0.011 |
| (v) Septic tank and soakage pit. | 0.045 | | |
| (vi) 5% contingencies. | 0.047 | Total | 0.181 |
| (vii) 6-1/2% departmental charges. | 0.064 | | |
| (viii) Furniture and equipment. | 0.100 | (5) Quarter for Ancillary staff | |
| Total | 1.156 | (i) Constraction of 520 sft @ Rs. 250 per sft. | 0.130 |
| (2) Rural Heahh Centre(25bedded) | | (ii) Compound wall | 0.006 |
| (i) Hospital buidling 10,000 sft @250 Rs. per sft. | 2.500 | (iii) 5% contingencies. | 0.007 |
| (ii) Boundry wall @ Rs.100 per Rft including gate. | 0.300 | (iv) 6-1/2% departmental charges of PWD. | 0.009 |
| (iii) Tube well/well and overhead reservior. | 0.200 | Total | 0.152 |
| (iv) WAPDA charges for external lectrification. | 0.090 | (6) Hostel for Six staff nurses | |
| (v) Septic tank and soakage pit. | 0.090 | (i) Hostel building 2700 sft (450 sft per nurse)@ Rs.250 per sft. | 0.675 |
| (vi) 5% contingencies. | 0.159 | (ii) Boundry wall | 0.025 |
| (vii) 6-1/2% departmental charges of PWD. | 0.217 | (iii) 5% contingencies. | 0.035 |
| (viii) Furniture. | 0.150 | (iv) 6-1/2% departmental charges of PWD. | 0.048 |
| (ix) Equipment including beds, linen. X-ray and dental unit. | 1.000 | (v) Kitchen equipment, furniture and bedding. | 0.08 |
| (x) Ambulance. | 0.200 | Total | 0.865 |
| (xi) Telephone installation charges. | 0.044 | | |
| Total Hospital Cost | 4.950 | (7) Cost estemales for BHU with residences | |
| (3) Doctor's Residence | | (i) BHU building | 1.156 |
| (i) Residence building 1560 sft @ Rs. 250 per sft. | 0.390 | (ii) Doctor's residence | 0.458 |
| (ii) Compound wall | 0.020 | (iii) Two residences for paramedics | 0.362 |
| (iii) 5% contingencies. | 0.020 | (iv) One residence for ancillary | 0.152 |
| (iv) 6-1/2% departmental charges of PWD. | 0.028 | Total | 2.128 |
| Total | 0.458 | | |

資料 III - 5 - 8 Continued

(8) Cost estimates for RHC with residences

| | |
|--|--------|
| (i) RHC buildings | 4.950 |
| (ii) Four residences for doctors including dental surgeon | 1.832 |
| (iii) Eight residences for paramedics | 1.448 |
| (iv) Six quarters for ancillary staff | 0.912 |
| (v) Hostel for staff nurses | 0.865 |
| Total | 10.007 |

Say Rs. 10.0 million

(9) Upgradation of existing BHU

| | |
|--|-------|
| (i) Doctor's residence | 0.458 |
| (ii) Civil works for two beds and labour room 600 sft @ Rs. 250 per sft including 5% contingencies & 6-1/2% departmental charges. | 0.168 |
| (iii) Equipment & linen | 0.050 |
| Total | 0.676 |

(10) UP-gradation of RHC Cost (Million Rs.)

| | |
|--|-------|
| (i) X-Ray and Dental Unit | 1.000 |
| (ii) Ambulance | 0.200 |
| (iii) Ward (additional beds) | 0.400 |
| (iv) Third doctor and dentist's residences | 0.932 |
| (v) Hostel for staff nurses | 0.865 |
| (vi) Residential accommodation for 4 paramedics | 0.724 |
| (vii) Residential accommodation for 3 ancillary staff members | 0.456 |
| (viii) Tubewell and overhead reservoir | 0.200 |
| (ix) Septic tank and soakage pit. | 0.090 |
| (x) Stand-by generator | 0.100 |
| Total | 4.967 |

(12) Cost of BHU with residences including price escalation

| Year | Cost |
|------|-------|
| 1. | 2.128 |
| 2. | 2.266 |
| 3. | 2.414 |
| 4. | 2.570 |

(13) Cost of RHC with residences including price escalation

| Year | Cost |
|------|--------|
| 1. | 10.000 |
| 2. | 10.650 |
| 3. | 11.342 |
| 4. | 12.080 |

(14) Cost of upgradation of existing BHU including price escalation

| Year | Cost |
|------|-------|
| 1. | 0.676 |
| 2. | 0.720 |
| 3. | 0.767 |
| 4. | 0.817 |

(15) Cost of upgradation of existing RHC including price escalation

| Year | Cost |
|------|-------|
| 1. | 4.967 |
| 2. | 5.290 |
| 3. | 5.634 |
| 4. | 6.000 |

(11) Price escalation has been assumed at compound rate of 6.5% per year.

資料Ⅲ-5-9 ヘルス・マンパワーの教育費用

| | Basic | Technical | Total |
|---|--------|-----------|---------|
| Physician(5 years) | 20,430 | 184,275 | 204,705 |
| Nurse(3 years) | 12,240 | 43,470 | 55,710 |
| Auxiliary(2 years) | 12,240 | 12,470 | 24,660 |
| Birth attendant (with primary education) | 2,790 | 2,000 | 4,790 |

Source : A Case Study of Pakistan(資料Ⅲ 5-9~12)

資料Ⅲ 5-10 BHUのランニング・コスト

Basic Health Unit

| Staff category | Recurring cost(Rs.000) | |
|-----------------------------|------------------------|---------------|
| | Current level | Optimum level |
| Physician with residence | 58 | 75 |
| Auxiliary with residence | 22 | 30 |
| Midwife/Dai with residence | 12 | 14 |
| Ancillary with residence | 11 | 11 |
| Ancillary without residence | 8 | 8 |

Note : -Current level expenditure of BHU=Rs.0.132 million,
optimum expenditure : Rs.0.159 million.

資料Ⅲ-5-11 RHCのランニング・コスト

Rural Health Centre

| Staff category | Recurring cost(Rs.000) | |
|---|------------------------|---------------|
| | Current level | Optimum level |
| Physician with residence. | 58 | 73 |
| Auxiliary with residence. | 20 | 28 |
| Auxiliary without residence. | 16 | — |
| Laboratory assistant with residence. | 19 | 21 |
| Laboratory assistant without residence. | 15 | — |
| X-ray technician with residence. | — | 31 |
| Clerk with residence. | 17 | 19 |
| Clerk without residence. | 13 | — |
| Midwife/Dai with residence. | 12 | 12 |
| Ancillary with residence. | 11 | 11 |
| Ancillary without residence. | 8 | 8 |

Note : —Current level recurring expenditure of RHC:Rs.0.339 million,
optimum recurring expenditure of RHC:Rs.0.467 million.

資料Ⅲ-5-12 RHCの整備に要する費用見積

Rural Health Centre

| Staff category | Development cost(Rs.000) | |
|--|--------------------------|---------------|
| | Current level | Optimum level |
| Physician with residence | 593 | 593 |
| Physician without residence | 218 | — |
| Auxiliary with residence | 208-211 | 307-310 |
| Auxiliary without residence | 57-60 | — |
| Laboratory assistant with residence | 234 | 333 |
| Laboratory assistant without residence | 83 | — |
| X-ray technician with residence | — | 580 |
| Clerk with residence | 208 | 307 |
| Clerk without residence | 56 | — |
| Midwife/Dai with residence | 158 | 158 |
| Ancillary with residence | 143 | 143 |
| Ancillary without residence | 13 | 13 |

Note : —Current level cost of RHC:3.0 million,
optimum cost of RHC:4.480 million.

資料Ⅲ-6-1 パラメディカル・スタッフ教育施設

POSITION OF PARAMEDIC INSTITUTE

JAMSHORO(SIND)

| | |
|---|---|
| 1) TOTAL COST | Rs: 7.375 Million Rs. |
| Cost of Building | Rs: 5.788 Million Rs. |
| Cost of Furniture | Rs: 1.587 Million Rs. |
| 2) FACILITIES FOR STUDENTS : | Hostel accommodation available for 50 students. |
| 3) BREAK-UP OF DISCIPLINES BEING TAUGHT TO 100 STUDENTS:- | |
| i) X-ray technicians | 25 |
| ii) O. T. technicians | 20 |
| iii) Laboratory technicians. | 20 |
| iv) Dental technicians. | 15 |
| v) Blood bank technicians.. | 10 |
| vi) Physiotherapy Technicians. | 5 |
| vii) E. C. G. technicians. | 5 |
| | <hr/> |
| | 100 |

Source : Health Services in Sind (Health Directorate Sind 26, Jun. 1988)

附表V-1-1 Punjab州における検査別のマラリア陽性率(1961~1983)

| YEAR | A. C. D. | | P. C. D. | | MBS. ECS etc. | | TOTAL | | | BER (ACD (PCD) | | | | | | | |
|------|------------|---------|----------|-------|---------------|----------|-------|--------|----------|----------------------|-------|---------|--------|--------|-------|-----|-------|
| | Population | Slides | Positive | PR | Slides | Positive | PR | Slides | Positive | | P. v. | P. f. | mix. | | | | |
| 1961 | | | | | | | | | 20527 | 648 | | | | | | | |
| 1962 | | | | | | | | | 82325 | 759 | | | | | | | |
| 1963 | | | | | | | | | 233664 | 5077 | | | | | | | |
| 1964 | | | | | | | | | 379350 | 4902 | | | | | | | |
| 1965 | | | | | | | | | 858590 | 6546 | | | | | | | |
| 1966 | | | | | | | | | 1529892 | 2861 | | | | | | | |
| 1967 | | | | | | | | | 2295099 | 3256 | | | | | | | |
| 1968 | | | | | | | | | 2671125 | 7375 | | | | | | | |
| 1969 | | | | | | | | | 3682718 | 35858 | | | | | | | |
| 1970 | | | | | | | | | 2827986 | 85509 | | | | | | | |
| 1971 | 28252000 | 2117905 | 150543 | 7.11 | - | 213641 | 15858 | 7.42 | 213338 | 4806 | 2.20 | 2549884 | 171209 | 161913 | 9030 | 266 | 8.25 |
| 1972 | 29063000 | 2729353 | 574776 | 21.06 | - | 176430 | 33596 | 19.04 | 149860 | 13721 | 9.15 | 3055643 | 622093 | 567573 | 53815 | 701 | 10.51 |
| 1973 | 29897000 | 2702756 | 560372 | 20.73 | - | 105368 | 19632 | 18.63 | 90293 | 11928 | 13.21 | 2898420 | 591932 | 523820 | 67355 | 757 | 9.39 |
| 1974 | 30755000 | 1958343 | 283152 | 14.46 | - | 49532 | 5574 | 11.25 | 45491 | 2676 | 5.88 | 2053366 | 291402 | 256451 | 34689 | 256 | 6.52 |
| 1975 | 31637900 | 2281743 | 200644 | 8.79 | - | 38377 | 3798 | 9.89 | 63149 | 4648 | 7.36 | 2383259 | 209090 | 118420 | 90405 | 265 | 7.33 |
| 1976 | 32589977 | 1869240 | 98284 | 5.25 | - | 35170 | 2252 | 6.41 | 89750 | 5016 | 5.56 | 1994160 | 105552 | 72740 | 38000 | 188 | 5.84 |
| 1977 | 33543901 | 1616345 | 34030 | 2.10 | - | 20029 | 776 | 3.87 | 90639 | 2114 | 2.33 | 1927013 | 36920 | 27022 | 9970 | 72 | 4.87 |
| 1978 | 34428929 | 1319339 | 6455 | 0.49 | 709 | 28450 | 413 | 1.45 | 193343 | 1052 | 0.54 | 1541132 | 7820 | 6165 | 1686 | 31 | 3.91 |
| 1979 | 32298054 | 1385166 | 3611 | 0.26 | 5199 | 49473 | 360 | 0.72 | 173245 | 1857 | 1.04 | 1612884 | 5828 | 3428 | 2426 | 26 | 4.06 |

| YEAR | A. C. D. | | P. C. D. | | MBS. ECS etc. | | TOTAL | | | BER (ACD PCD) | | | | | | | |
|------|-------------------|-------------|----------|-------------|---------------|-------------|--------|-------------|-----------|---------------------|------|---------|-------|-------|-------|----|------|
| | Population Slides | Positive PR | Slides | Positive PR | Slides | Positive PR | Slides | Positive PR | P.f. mix. | | | | | | | | |
| 1980 | 36190099 | 1596722 | 6965 | 0.43 | 7148 | 75963 | 730 | 0.96 | 163468 | 1842 | 1.11 | 1838153 | 9537 | 7633 | 1935 | 31 | 4.62 |
| 1981 | 37048855 | 1518847 | 12548 | 0.82 | 4962 | 47564 | 970 | 2.03 | 127167 | 3901 | 3.06 | 1693578 | 17419 | 15003 | 2458 | 42 | 4.22 |
| 1982 | 37651501 | 1537225 | 18210 | 1.18 | 7489 | 93019 | 3678 | 3.95 | 185635 | 5207 | 2.80 | 1815879 | 27095 | 20339 | 6827 | 71 | 4.33 |
| 1983 | 38097554 | 1298746 | 20333 | 1.56 | 6632 | 76040 | 3995 | 5.25 | 123044 | 5640 | 4.58 | 1497830 | 29968 | 20009 | 10052 | 93 | 3.60 |

(Malaria Control Programme in Pakistan, PMRC, 1983)

A. C. D. ; Active case Detection.

P. C. D. ; Passive case Detection.

M. B. S. ; Mass Blood Surveys.

E. C. S. ; Epidemiological Contact Surveys.

附表V-1-2 Sind州における検査別のマラリア陽性率 (1965~1983)

| YEAR | A. C. D. | | P. C. D. | | MBS. ECS etc. | | TOTAL | | | BER (ACD PCD) | | | | | |
|------|-------------------|-------------|--------------|-------------|---------------|-------------|--------|-------------|-------|---------------------|-------|-------|------|----|------|
| | Population Slides | Positive PR | Posts Slides | Positive PR | Slides | Positive PR | Slides | Positive PR | P. v. | | P. f. | mix. | | | |
| 1965 | 3024591 | | | | | | 56764 | 3731 | 2565 | 1207 | 42 | 1.88 | | | |
| 1966 | 3262455 | | | | | | 78629 | 3133 | 1771 | 1405 | 43 | 2.41 | | | |
| 1967 | 6821153 | | | | | | 210688 | 5091 | 3224 | 1946 | 80 | 3.09 | | | |
| 1968 | 7071810 | | | | | | 422999 | 8394 | 6572 | 1987 | 183 | 3.98 | | | |
| 1969 | 6398927 | | | | | | 713895 | 8994 | 6132 | 2914 | 166 | 11.17 | | | |
| 1970 | 6569327 | | | | | | 534132 | 12108 | 8273 | 3936 | 114 | 8.13 | | | |
| 1971 | 6647049 | | | | | | 580709 | 11369 | 9069 | 2363 | 63 | 8.74 | | | |
| 1972 | 6187194 | | | | | | 615299 | 9508 | 6897 | 2682 | 71 | 9.94 | | | |
| 1973 | 6824359 | | | | | | 657307 | 11280 | 7034 | 4334 | 89 | 9.63 | | | |
| 1974 | 7141249 | | | | | | 252313 | 3620 | 2506 | 1142 | 28 | 3.53 | | | |
| 1975 | 7444993* | MIL | - | - | 35865 | 1790 | 4.99 | 225 | 3 | 1.33 | 1203 | 598 | 8 | - | |
| 1976 | 7748738 | 292625 | 4779 | 1.63 | 534 | 41485 | 1386 | 3.34 | 2595 | 54 | 2.08 | 3261 | 3021 | 63 | 4.31 |
| 1977 | 8032821 | 316358 | 4807 | 1.52 | - | 53011 | 2638 | 4.97 | 27166 | 1090 | 4.01 | 3417 | 5167 | 49 | 4.59 |
| 1978 | 8260022 | 241708 | 2635 | 1.09 | - | 115627 | 3652 | 3.16 | 39766 | 1070 | 2.69 | 3911 | 3503 | 57 | 4.33 |
| 1979 | 8471098 | 290689 | 1681 | 0.58 | - | 68060 | 1880 | 2.76 | 53695 | 771 | 1.44 | 2378 | 1989 | 35 | 4.23 |
| 1980 | 8579767 | 302027 | 1188 | 0.39 | - | 108946 | 1715 | 1.57 | 45528 | 594 | 1.30 | 2302 | 1215 | 20 | 4.84 |
| 1981 | 9164127 | 341090 | 2211 | 0.65 | - | 112112 | 2076 | 1.85 | 58212 | 790 | 1.36 | 3516 | 1602 | 41 | 4.95 |
| 1982 | 9353429 | 368929 | 3725 | 1.01 | - | 109864 | 2636 | 2.39 | 46979 | 858 | 1.83 | 4806 | 2457 | 44 | 5.12 |
| 1983 | 9624678 | 144277 | 2606 | 1.80 | - | 198098 | 7273 | 3.87 | 65051 | 2637 | 4.05 | 8406 | 4181 | 71 | 3.55 |

* ESTIMATED
(Malaria Control Programme in Pakistan. PMRC, 1983)

附表V-1-3 N.W.F.州における検査別のマラリア陽性率(1966~1983)

| YEAR | POPULATION | A. C. D. | | P. C. D. | | M.S. ECS etc. | | TOTAL | | | | BER | | | | | |
|------|------------|-----------------|----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|------------------|-----------------------|-------|------|-----|------|----|------|
| | | Slides SUOES | Positive PR | Posts SUOES | Slides POSWE | Positive PR | Slides POSWE | Positive PR | Slides POSWE | Positive P.v. | P.f. mix. P.m. MAX | | | | | | |
| 1966 | 2662234 | | | | | | | 92432 | 3162 | 2807 | 402 | 0 | 47 | - | | | |
| 1967 | 2788492 | | | | | | | 92975 | 753 | 714 | 55 | 0 | 16 | - | | | |
| 1968 | 4632428 | | | | | | | 228366 | 1785 | 1692 | 100 | 24 | 31 | - | | | |
| 1969 | 5658981 | | | | | | | 379443 | 1748 | 1429 | 306 | 51 | 38 | - | | | |
| 1970 | 6330891 | | | | | | | 442404 | 9280 | 8194 | 1058 | 149 | 121 | - | | | |
| 1971 | 6520158 | | | | | | | 605751 | 18214 | 15777 | 2630 | 12 | 205 | - | | | |
| 1972 | 7032752 | | | | | | | 674905 | 10199 | 9058 | 793 | 0 | 102 | - | | | |
| 1973 | 7289015 | 602793 | 1906 | 0.31 | 23779 | 677 | 2.84 | 49466 | 746 | 1.50 | 2706 | 656 | 1 | 34 | 8.59 | | |
| 1974 | 7588663 | 636676 | 4499 | 0.70 | 25606 | 1374 | 5.36 | 65266 | 1641 | 2.51 | 7049 | 486 | 1 | 22 | 8.72 | | |
| 1975 | 7810845 | 647081 | 14720 | 2.27 | 33299 | 3234 | 9.71 | 83079 | 9124 | 10.98 | 24734 | 2470 | 1 | 127 | 8.71 | | |
| 1976 | 7969814 | 428152 | 6431 | 1.50 | 15939 | 1457 | 9.14 | 50401 | 2275 | 4.51 | 49492 | 10194 | 9525 | 693 | 0 | 54 | 5.57 |
| 1977 | 8127265 | 453239 | 975 | 0.21 | 18974 | 739 | 3.89 | 33150 | 180 | 0.54 | 505363 | 1894 | 1810 | 89 | 0 | 5 | 5.81 |
| 1978 | 8169753 | 455697 | 192 | 0.04 | 37603 | 314 | 0.83 | 115544 | 140 | 0.12 | 308844 | 646 | 565 | 84 | 0 | 3 | 6.04 |
| 1979 | 8272073 | 476353 | 456 | 0.09 | 41773 | 480 | 1.15 | 65698 | 885 | 1.34 | 583824 | 1815 | 1436 | 389 | 0 | 10 | 6.26 |
| 1980 | 8427046 | 500887 | 886 | 0.17 | 52789 | 681 | 1.29 | 58914 | 415 | 0.70 | 612590 | 1982 | 1760 | 234 | 0 | 12 | 6.60 |
| 1981 | 8608917 | 487265 | 1713 | 0.35 | 48443 | 1645 | 3.39 | 65800 | 629 | 0.95 | 601508 | 3987 | 3711 | 287 | 0 | 11 | 5.96 |
| 1982 | 8790466 | 520301 | 1972 | 0.37 | 56150 | 5156 | 9.18 | 27151 | 309 | 1.13 | 603602 | 4437 | 4301 | 144 | 0 | 8 | 6.55 |
| 1983 | 9074109 | 481899 | 2646 | 0.54 | 38591 | 1633 | 4.23 | 49329 | 1078 | 2.18 | 569819 | 5357 | 4519 | 858 | 0 | 20 | 5.73 |

(Malaria Control Programme in Pakistan, PMRC, 1983)

附表V-1-4 Balhistan 州における検査別のマラリア陽性率 (1970~1983)

| YEAR | A. C. D. | | | P. C. D. | | | MBS. ECS etc. | | | TOTAL | | | BER (ACD PCD) | | | | |
|----------------------|----------------------|----------------|-------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------|------|-------|---------------------|------|-----|----|------|
| | Population Slides | Positive PR | Posts | Slides Positive PR | Slides Positive PR | Slides Positive PR | Slides Positive PR | Slides Positive PR | Slides Positive PR | P.v. | P.f. | mix. | | | | | |
| 1970 JUL. Dec. | 1103256 | 15537 | 508 | 3.26 | - | 6138 | 522 | 8.42 | 1660 | 93 | 5.60 | 23395 | 1123 | 524 | 626 | 25 | 1.97 |
| 1971 | 1280132 | 61122 | 1604 | 2.62 | - | 10453 | 862 | 8.24 | 783 | 30 | 3.83 | 72385 | 2496 | 1640 | 890 | 44 | 5.59 |
| 1972 | 1321405 | 67523 | 576 | 0.85 | - | 12010 | 583 | 4.85 | 3529 | 20 | 0.56 | 83062 | 1179 | 717 | 489 | 27 | 6.01 |
| 1973 | 1512797 | 76637 | 802 | 1.04 | - | 13240 | 755 | 5.70 | 1612 | 36 | 2.23 | 91489 | 1593 | 808 | 805 | 20 | 5.94 |
| 1974 | 1512797 | 59068 | 335 | 0.56 | - | 9774 | 318 | 3.25 | 11037 | 81 | 0.73 | 79879 | 732 | 541 | 206 | 15 | 4.55 |
| 1975 | 1512797 | 25021 | 214 | 0.85 | - | 6326 | 212 | 3.35 | 2381 | 58 | 2.43 | 33728 | 484 | 186 | 307 | 9 | 2.07 |
| 1976 | 1543103 | 26922 | 112 | 0.41 | - | 15871 | 412 | 2.59 | 8521 | 86 | 1.01 | 51314 | 610 | 247 | 374 | 11 | 2.77 |
| 1977 | 1575683 | 35735 | 152 | 0.42 | - | 16223 | 268 | 1.65 | 5600 | 63 | 1.12 | 57598 | 483 | 279 | 219 | 15 | 3.30 |
| 1978 | 1778515 | 27331 | 112 | 0.41 | - | 13623 | 168 | 1.23 | 24452 | 126 | 0.51 | 65427 | 406 | 284 | 127 | 5 | 2.30 |
| 1979 | 1839136 | 29558 | 66 | 0.22 | - | 16214 | 162 | 0.99 | 33560 | 137 | 0.41 | 79332 | 365 | 240 | 132 | 7 | 2.48 |
| 1980 | 1906777 | 35221 | 134 | 0.38 | - | 17057 | 305 | 1.78 | 10397 | 62 | 0.59 | 62675 | 501 | 225 | 293 | 17 | 2.74 |
| 1981 | 2113076 | 24469 | 114 | 0.46 | - | 13873 | 338 | 2.43 | 6262 | 16 | 0.25 | 44604 | 469 | 292 | 187 | 10 | 1.81 |
| 1982 | 2271603 | 29425 | 240 | 0.81 | - | 14232 | 444 | 3.12 | 11735 | 158 | 1.34 | 55392 | 842 | 516 | 349 | 23 | 1.92 |
| 1983 upts Aug | 2388989 | 13841 | 146 | 1.05 | - | 9082 | 216 | 2.37 | 6374 | 171 | 2.68 | 29297 | 533 | 398 | 148 | 13 | 0.96 |

(Malaria Control Programme in Pakistan, PMRC, 1983)

附表V-1-5 Punjab州Sheikhupura 地区*における年次別
及び原虫種別マラリア患者発生状況
Reported cases of malaria by years and species in Sheikhupura District

| Year | Total Slides | Positive Cases(Species) | | | | Rates | | |
|------|--------------|-------------------------|-------|--------|--------|--------|-----------|-----------|
| | | P. v. | P. f. | Mix | Total | SPR(%) | API/1000. | P. f. (%) |
| 1960 | 21,545 | 2,133 | 1,348 | 135 ** | 3,370 | 15.84 | 3.08 | 40.97 |
| 1961 | 20,543 | 191 | 472 | 15 | 648 | 3.15 | 0.59 | 73.01 |
| 1962 | 41,042 | 154 | 280 | 7 | 427 | 1.04 | 0.38 | 65.38 |
| 1963 | 34,150 | 27 | 52 | 4 | 75 | 0.22 | 0.06 | 68.18 |
| 1964 | 51,638 | 23 | 64 | 2 | 85 | 0.16 | 0.07 | 75.00 |
| 1965 | 127,604 | 64 | 25 | 3 | 86 | 0.06 | 0.07 | 30.00 |
| 1966 | 160,923 | 41 | 11 | 0 | 52 | 0.03 | 0.04 | 20.00 |
| 1967 | 141,570 | 74 | 17 | 1 | 90 | 0.06 | 0.07 | 19.04 |
| 1968 | 153,100 | 286 | 8 | 0 | 294 | 0.19 | 0.22 | 2.63 |
| 1969 | 157,545 | 3,369 | 94 | 2 | 3,461 | 2.19 | 2.52 | 2.69 |
| 1970 | 115,139 | 8,993 | 219 | 23 | 9,189 | 7.96 | 6.45 | 2.38 |
| 1971 | 97,898 | 11,115 | 1,574 | 65 | 12,624 | 12.98 | 8.54 | 12.40 |
| 1972 | 179,591 | 35,631 | 7,073 | 68 | 42,636 | 24.80 | 27.76 | 16.57 |
| 1973 | 209,584 | 39,502 | 2,890 | 11 | 42,381 | 20.00 | 26.47 | 6.85 |
| 1974 | 107,744 | 13,024 | 2,056 | 0 | 15,080 | 13.98 | 9.19 | 13.59 |
| 1975 | 94,093 | 2,050 | 3,369 | 6 | 5,413 | 5.75 | 3.25 | 62.08 |
| 1976 | 67,246 | 393 | 549 | 2 | 940 | 1.39 | 0.54 | 58.27 |
| 1977 | 69,126 | 146 | 68 | 0 | 214 | 0.30 | 0.12 | 30.00 |
| 1978 | 74,014 | 248 | 95 | 0 | 343 | 0.46 | 0.18 | 26.08 |
| 1979 | 64,162 | 956 | 256 | 4 | 1,211 | 1.88 | 0.64 | 20.74 |
| 1980 | 73,817 | 2,089 | 277 | 2 | 2,364 | 3.20 | 1.22 | 11.56 |
| 1981 | 70,875 | 1,734 | 183 | 4 | 1,913 | 2.69 | 0.96 | 9.29 |
| 1982 | 77,893 | 2,154 | 1,103 | 6 | 3,251 | 4.17 | 1.60 | 33.81 |
| 1983 | 76,383 | 2,200 | 2,383 | 10 | 4,573 | 5.98 | 2.18 | 52.11 |

* Population: 1961-1,091,218; 1970-1,422,729; 1980-1,935,115

**including 24 cases of P. malariae

(Malaria control programme in Pakistan, Pakistan Medical Research Council)

附表V-1-6 Sind州Nawabshah 地区*における年次別及び原虫種別
マラリア患者発生状況

Reported cases of malaria by years and species in Nawabshah District*

| Year | Total Slides | Positive Cases(Species) | | | | Rates | | |
|------|-----------------|-------------------------|-------|-----|-------|--------|----------|-----------|
| | | P. v. | P. f. | Mix | Total | SPR(%) | API/1000 | P. f. (%) |
| 1972 | 49,478 | 589 | 178 | 10 | 757 | 1.53 | 0.94 | 23.51 |
| 1973 | 45,422 | 980 | 635 | 39 | 1,576 | 3.46 | 1.93 | 40.17 |
| 1974 | 24,832 | 266 | 235 | 2 | 499 | 2.00 | 0.58 | 47.00 |
| 1975 | - | - | - | - | - | - | - | - |
| 1976 | 26,121 | 457 | 494 | 23 | 928 | 3.55 | 1.08 | 53.24 |
| 1977 | 27,400 | 295 | 379 | 10 | 664 | 2.42 | 0.68 | 57.15 |
| 1978 | 27,968 | 346 | 191 | 4 | 533 | 1.90 | 0.56 | 35.94 |
| 1979 | 39,053 | 169 | 88 | 2 | 255 | 0.65 | 0.26 | 34.66 |
| 1980 | 40,798 | 125 | 34 | 0 | 159 | 0.39 | 0.16 | 21.36 |
| 1981 | 45,761 | 308 | 102 | 5 | 405 | 0.88 | 0.34 | 25.32 |
| 1982 | 43,056 | 205 | 90 | 0 | 295 | 0.68 | 0.25 | 30.73 |
| 1983 | 30,246 | 455 | 431 | 1 | 885 | 2.92 | 0.74 | 48.70 |

* Population: 1972-799,407; 1975-853,310; 1980-967,887

(Malaria control programme in Pakistan, Pakistan Medical Research Council)

附表V-1-7 N. W. F. 州Bannu 地区* における年次別及び原虫種別
マラリア患者発生状況

Reported cases of malaria by years and species in Bannu District*

| Year | Total Slides | Positive Cases (Species) | | | | Rates | | |
|------|-----------------|--------------------------|-------|-----|-------|--------|----------|-----------|
| | | P. v. | P. f. | Mix | Total | SPR(%) | API/1000 | P. f. (%) |
| 1965 | 2,397 | 281 | 78 | 4 | 355 | 14.8 | 0.63 | 21.97 |
| 1966 | 31,790 | 881 | 125 | 27 | 979 | 3.1 | 1.74 | 12.76 |
| 1967 | 24,309 | 60 | 7 | - | 67 | 0.28 | 0.11 | 10.44 |
| 1968 | 40,341 | 15 | 12 | - | 27 | 0.06 | 0.04 | 44.44 |
| 1969 | 67,418 | 129 | 25 | - | 154 | 0.22 | 0.23 | 16.23 |
| 1970 | 71,547 | 970 | 107 | 6 | 1,071 | 1.48 | 1.5 | 9.99 |
| 1971 | 93,728 | 2,106 | 473 | 43 | 2,536 | 2.7 | 3.5 | 18.65 |
| 1972 | 94,675 | 1,436 | 151 | 18 | 1,569 | 1.7 | 2.1 | 9.62 |
| 1973 | 85,575 | 257 | 148 | 8 | 397 | 0.46 | 0.54 | 32.27 |
| 1974 | 93,638 | 980 | 189 | 8 | 1,061 | 1.13 | 1.43 | 17.81 |
| 1975 | 97,897 | 5,595 | 1,168 | 56 | 6,707 | 6.8 | 8.78 | 17.41 |
| 1976 | 89,612 | 3,641 | 306 | 28 | 3,919 | 4.4 | 5.05 | 7.80 |
| 1977 | 74,392 | 285 | 26 | 1 | 310 | 0.4 | 0.39 | 8.38 |
| 1978 | 107,626 | 53 | 52 | 1 | 104 | 0.09 | 0.13 | 50.00 |
| 1979 | 85,961 | 268 | 289 | 5 | 552 | 0.64 | 0.69 | 52.35 |
| 1980 | 99,425 | 684 | 257 | 6 | 935 | 0.9 | 1.1 | 27.48 |
| 1981 | 99,146 | 1,301 | 327 | 9 | 1,619 | 1.6 | 1.9 | 20.19 |
| 1982 | 94,869 | 1,474 | 197 | 12 | 1,659 | 1.7 | 1.8 | 11.87 |

* Population: 1965-563,127; 1970-667,781; 1980-829,271

(Malaria control programme in Pakistan, Pakistan Medical Research Council)

附表V-1-8 Baluchistan 州 Khuzdar地区* における年次別及び原虫種別
マラリア患者発生状況

Reported cases of malaria by years and species in Khuzdar District*

| Year | Total Slides | Positive Cases(Species) | | | | Rates | | |
|------|-----------------|-------------------------|-------|-----|-------|--------|----------|-----------|
| | | P. v. | P. f. | Mix | Total | SPR(%) | API/1000 | P. f. (%) |
| 1972 | 5,690 | 36 | 66 | 1 | 101 | 1.77 | 1.11 | 65.53 |
| 1973 | 9,753 | 62 | 343 | 6 | 399 | 4.09 | 3.96 | 85.81 |
| 1974 | 10,147 | 9 | 73 | 4 | 78 | 0.76 | 0.71 | 93.42 |
| 1975 | 3,741 | 37 | 151 | 3 | 188 | 5.02 | 1.71 | 81.87 |
| 1976 | 6,516 | 16 | 134 | 0 | 150 | 2.30 | 1.21 | 89.13 |
| 1977 | 11,488 | 101 | 110 | 8 | 203 | 1.76 | 1.47 | 53.97 |
| 1978 | 11,660 | 25 | 43 | 0 | 68 | 0.58 | 0.45 | 63.79 |
| 1979 | 9,875 | 62 | 35 | 2 | 95 | 0.96 | 0.63 | 36.45 |
| 1980 | 7,957 | 19 | 9 | 1 | 27 | 0.33 | 0.14 | 33.33 |
| 1981 | 7,726 | 42 | 39 | 4 | 77 | 0.99 | 0.37 | 50.50 |
| 1982 | 9,611 | 50 | 29 | 5 | 74 | 0.76 | 0.34 | 39.47 |
| 1983 | 18,726 | 191 | 169 | 15 | 345 | 1.84 | 1.59 | 48.91 |

* Population: 1972-90,705; 1975-109,738; 1980-183,228

(Malaria control programme in Pakistan, Pakistan Medical Research Council)

附表V-1-9 パキスタン四地区における月別マラリア患者発生状況 (1982)

| District | Species | Jan. | Feb. | Mar. | Apr. | May. | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-------------|-------------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|
| Sheikhupura | P.v. | 7 | 26 | 14 | 48 | 322 | 194 | 115 | 117 | 428 | 503 | 247 | 95 | 2,116 |
| | P.f. | 7 | 1 | 0 | 1 | 14 | 12 | 22 | 14 | 104 | 299 | 384 | 248 | 1,106 |
| | Total | 14 | 27 | 14 | 49 | 336 | 206 | 137 | 131 | 131 | 532 | 802 | 343 | 3,222 |
| | P.f.rate(%) | 50.0 | 3.7 | 0.0 | 2.0 | 4.2 | 5.8 | 16.1 | 10.7 | 19.5 | 37.3 | 60.9 | 72.3 | 34.3 |
| Bannu | P.v. | 70 | 120 | 211 | 288 | 163 | 71 | 15 | 35 | 79 | 206 | 197 | 29 | 1,484 |
| | P.f. | 35 | 39 | 12 | 10 | 3 | 3 | 1 | 1 | 6 | 40 | 31 | 16 | 197 |
| | Total | 105 | 159 | 223 | 298 | 166 | 74 | 16 | 36 | 36 | 85 | 246 | 228 | 45 |
| | P.f.rate(%) | 33.3 | 24.5 | 5.4 | 3.4 | 1.8 | 4.1 | 6.3 | 2.8 | 7.1 | 16.3 | 13.6 | 35.6 | 11.7 |
| Nawabshah | P.v. | 30 | 13 | 19 | 19 | 30 | 18 | 11 | 12 | 12 | 12 | 17 | 12 | 205 |
| | P.f. | 8 | 8 | 12 | 7 | 4 | 2 | 4 | 2 | 2 | 7 | 21 | 12 | 89 |
| | Total | 38 | 21 | 31 | 26 | 34 | 20 | 15 | 14 | 14 | 14 | 38 | 24 | 294 |
| | P.f.rate(%) | 21.1 | 38.1 | 38.7 | 26.9 | 11.8 | 10.0 | 26.7 | 14.3 | 14.3 | 36.8 | 55.3 | 50.0 | 30.3 |
| Khuzdar | P.v. | 0 | 2 | 3 | 4 | 3 | 10 | 9 | 6 | 0 | 0 | 0 | 13 | 50 |
| | P.f. | 0 | 0 | 1 | 0 | 3 | 8 | 1 | 3 | 1 | 0 | 0 | 0 | 29 |
| | Total | 0 | 2 | 4 | 4 | 6 | 18 | 10 | 9 | 9 | 1 | 0 | 0 | 79 |
| | P.f.rate(%) | 0.0 | 0.0 | 25.0 | 0.0 | 50.0 | 44.4 | 10.0 | 33.3 | 100.0 | 0.0 | 0.0 | 48.0 | 36.7 |
| Grand Total | P.v. | 107 | 161 | 247 | 359 | 518 | 293 | 150 | 170 | 519 | 721 | 461 | 149 | 3,855 |
| | P.f. | 50 | 48 | 25 | 18 | 24 | 25 | 28 | 20 | 113 | 346 | 436 | 288 | 1,421 |
| | Total | 157 | 209 | 272 | 377 | 542 | 318 | 178 | 190 | 190 | 632 | 1,067 | 437 | 5,276 |
| | P.f.rate(%) | 31.8 | 23.0 | 9.2 | 4.8 | 4.4 | 7.9 | 15.7 | 10.5 | 17.9 | 32.4 | 48.6 | 65.9 | 26.9 |

(Malaria Control Programme in Pakistan, Pakistan Medical Research Council)

附表V-1-10 熱帯熱マラリア患者22名についてのクロロキン抵抗性試験,
in vivo と in vitro 試験の相関

Results of Chloroquine-resistant test, correlation between
in vivo and in vitro test in 22 semi-immune malaria patients

| | in vitro | | |
|--------------------------|-----------|--------------|-----------|
| | Sensitive | Intermediate | Resistant |
| In vivo results(day 14): | | | |
| Sensitive | 8 | 3 | 6 |
| R- I | 0 | 0 | 3 |
| R- II | 0 | 0 | 2 |

(Emile Fox, Amir A. Khaliq, M. Sarwar, G. T. Strickland: The Lancet, June 22, 1985)

附表V-1-11 熱帯熱マラリア原虫のクロロキン/アモデアキン抵抗株出現状況
(Shah and Yasin, 1987)

Response of *P. falciparum* to Chloroquine/Amodiaquine treatment

| District | Drug | Sensitive(%) | R- I (%) | R- II (%) | R- III | Absent | Total |
|-------------------|-------------|--------------|----------|-----------|--------|--------|-------|
| Muzaff- argarh | Chloroquine | 11(28.2) | 16(41.8) | 9(23.1) | 0 | 3 | 39 |
| | Amodiaquine | 15(65.2) | 6(26.1) | 0 | 0 | 2 | 23 |
| Mardan | Chloroquine | 3(5.8) | 39(76.4) | 7(13.7) | 0 | 2 | 51 |
| | Amodiaquine | 1(10.0) | 8(80.0) | 1(10.0) | 0 | 0 | 10 |

(Annual Report, 1987; National Institute of Malaria Research and Training)

附表V-1-12 R-I型抵抗株の熱帯熱マラリア原虫が示す再燃のパターン
(Shah and Yasin, 1987)

The pattern of recrudescence showing R-I type of resistance

| Observation Day | Number of cases showing recrudescence | | | |
|--------------------|---------------------------------------|-------------|-----------------|-------------|
| | Muzaffargarh District | | Mardan District | |
| | Chloroquine | Amodiaquine | Chloroquine | Amodiaquine |
| 7 | 1 | - | 5 | 2 |
| 10 | 2 | - | 7 | 2 |
| 13 | 1 | 2 | 1 | 1 |
| 16 | 1 | 2 | 11 | 1 |
| 19 | 2 | - | 9 | 0 |
| 22 | 1 | 1 | 3 | 0 |
| 25 | 3 | 1 | 3 | 1 |
| 28 | 5 | - | 0 | 1 |
| Total | 16 | 6 | 39 | 8 |

(Annual Report, 1987; National Institute of Malaria Research and Training)

附表V-1-13(1) パキスタン (W) 及びバングラディッシュ (E)
に生息する蚊のリスト

Anopheles (Anopheles)

| | |
|--|------|
| <u>barbirostris</u> van der Wulp, 1884. | W, E |
| <u>barianensis</u> James, 1911. | W, - |
| <u>bengalensis</u> Puri, 1930* . | - E |
| <u>gigas</u> Giles, 1901. | W, E |
| <u>gigas var similensis</u> (James, 1911). | W, E |
| <u>habibi</u> Mulligan and Puri, 1936. | W, - |
| <u>lindesayi</u> Giles, 1900. | W, - |
| <u>nigerrimus</u> Giles, 1900. | W, E |
| <u>umbrosus</u> (Theobald, 1903). | -, E |

Anopheles (Cellia)

| | |
|--------------------------------------|------|
| <u>aconoitus</u> Donitz, 1902. | -, E |
| <u>annularis</u> van der Wulp, 1884. | W, E |
| <u>culicifacies</u> Giles, 1901. | W, E |
| <u>dthali</u> Patton, 1905. | W, - |
| <u>fluviatilis</u> James, 1902. | W, E |
| <u>jameeii</u> Theobald, 1901. | -, E |
| <u>jeyporiensis</u> James, 1902. | -, E |
| <u>karwari</u> (James, 1903). | -, E |
| <u>kochi</u> Donitz, 1901 | -, E |

* Anopheles athenit ssp bengalensis raised to specific level.

附表 V - 1 -- 13(2)

| | |
|---|-------|
| <u>leucosphyrus</u> Donitz, 1901. | - , E |
| <u>maculatus</u> Theobald, 1901. | W, E |
| <u>maculatus</u> ssp <u>willimori</u> (James, 1903). | W, E |
| <u>minimus</u> Theobald, 1901. | - , E |
| <u>moghulensis</u> Christophers, 1924. | W, - |
| <u>multicolor</u> Cambouliu, 1902. | W, - |
| <u>pallidus</u> Theobald, 1901. | W, E |
| <u>philippinensis</u> Ludlow, 1902. | - , E |
| <u>pulcherrimus</u> Theobald, 1902. | W, - |
| <u>ramsayi</u> Covell, 1927. | - , E |
| <u>sergenti</u> (Theobald, 1907). | W, - |
| <u>splendidus</u> Koizumi, 1920. | W, E |
| <u>stephensi</u> Liston, 1901. | W, E |
| <u>stephensi</u> ssp <u>mysorensis</u> Sweet & Rao, 1937. | W, - |
| <u>subpictus</u> Grassi, 1899. | W, E |
| <u>sundaicus</u> (Rodenwaldt, 1925). | - , E |
| <u>superpictus</u> Grassi, 1899. | W, - |
| <u>tessellatus</u> Theobald, 1901. | - , E |
| <u>theobaldi</u> Giles, 1901. | W, E |
| <u>turkhudi</u> Liston, 1901. | W, - |
| <u>vagus</u> Donitz, 1902. | - , E |
| <u>varuna</u> Iyengar, 1924. | - , E |
| <u>Toxorhynchites (Toxorhynchites)</u> | |
| <u>albipes</u> (Edwards, 1922). | W, - |
| <u>splendens</u> (Wiedemann, 1819). | - , E |
| <u>Tripteroides (Rachionotomyia)</u> | |
| <u>aranoides</u> (Theobald, 1901). | - , E |

附表 V - 1 - 13(3)

Malaya

genurostris Leicester, 1908. -, E

jacobsoni (Edwards, 1930). -, E

Ficalbia (Ficalbia)

minima (Theobald, 1901). -, E

Ficalbia (Mimomyia)

chamberlaini ssp. clavipalpus (Theobald, 1908). W, E

hybrida (Leicester, 1908). -, E

Coquillettidia (Coquillettidia)

crassipes (van der Wulp, 1881). W, E

ochracea (Theobald, 1903). -, E

Mansonia (Mansonioides)

annulifera (Theobald, 1901). -, E

dives (Schiner, 1868). -, E

indiana Edwards, 1930. W, E

uniformis (Theobald, 1901). W, E

Uranotaenia

unguiculata Edwards, 1913. W, -

Orthopodomyia

anopheloides (Giles, 1903). -, E

Aedeomyia

catasticta knab, 1909. -, E

Heizmanta

covelli Barraud, 1929. -, E

Aedes (Mucidus)

scatophagoides (Theobald, 1901). W, E

Aedes (Ochlerotatus)

caspius (Pallas, 1771). W, -

附表 V - 1 - 14(4)

| | |
|--|------|
| <u>pulchritarsis</u> (Rondani, 1872). | W, - |
| <u>pulchritarsis</u> var. <u>versicolor</u> (Barraud, 1924). | W, - |
| <u>pulchritarsis</u> ssp. <u>asiaticus</u> Edwards, 1926. | W, - |
| <u>pullatus</u> (Coquillett, 1904). | W, - |
| <u>Aedes (Finlaya)</u> | |
| <u>albolateralis</u> (Theobald, 1908). | W, E |
| <u>assamensis</u> (Theobald, 1908). | -, E |
| <u>christophersi</u> Edwards, 1922. | W, - |
| <u>dissimilis</u> (Leicester, 1908). | -, E |
| <u>khazani</u> Edwards, 1922. | -, E |
| <u>lophoventralis</u> (Theobald, 1910). | -, E |
| <u>niveus</u> (Ludlow, 1903). | -, E |
| <u>oreophilus</u> Edwards, 1916. | W, - |
| <u>pseudotaeniatus</u> (Giles, 1901). | W, E |
| <u>pulchriventer</u> (Giles, 1901). | W, - |
| <u>shortti</u> (Barraud, 1923). | W, - |
| <u>sintoni</u> (Barraud, 1924). | W, - |
| <u>Aedes (Christophersiomyia)</u> | |
| <u>thomsini</u> (Theobald, 1905). | W, E |
| <u>Aedes (Stegomyia)</u> | |
| <u>aeppti</u> (Linnaeus, 1762). | W, E |
| <u>albopictus</u> (Skuse, 1894). | W, E |
| <u>annandalei</u> (Theobald, 1910). | -, E |
| <u>patriciae</u> Mattingly, 1954. | W, - |
| <u>unilineatus</u> (Theobald, 1906). | W, - |
| <u>vittatus</u> (Bigot, 1861). | W, E |
| <u>w-albus</u> (Theobald, 1905). | W, E |

附表V-1-13(5)

Aedes (Aedimorphus)

| | |
|--|------|
| <u>caecus</u> (Theobald, 1901). | W, E |
| <u>culicinus</u> Edwards, 1922. | W, - |
| <u>pallidostratus</u> (Theobald, 1907). | W, E |
| <u>pipersalatus</u> (Giles, 1901). | W, E |
| <u>punctifemoris</u> (Ludlow, 1921). | -, E |
| <u>taeniorhynchoides</u> (Christophers, 1911). | W, - |
| <u>vexans</u> (Meigen, 1830). | W, - |

Aedes (Indusius)

| | |
|-------------------------------------|------|
| <u>pulverulentus</u> Edwards, 1922. | W, - |
|-------------------------------------|------|

Aedes (Neomelaniconion)

| | |
|--------------------------------------|------|
| <u>lineatopennis</u> (Ludlow, 1905). | W, E |
|--------------------------------------|------|

Aedes (Diceromyia)

| | |
|------------------------------------|------|
| <u>iyengari</u> Edwards, 1923. | -, E |
| <u>micropterus</u> (Giles, 1901). | W, - |
| <u>periskelatus</u> (Giles, 1902). | W, - |
| <u>reginae</u> Edwards, 1922. | -, E |

Aedes (Neomacleaya)

| | |
|------------------------------------|------|
| <u>andamanensis</u> Edwards, 1922. | -, E |
| <u>indicus</u> (Theobald, 1907). | W, - |
| <u>yusafi</u> Barraud, 1931. | W, - |

Armigeres (Armigeres)

| | |
|---------------------------------------|------|
| <u>subalbatus</u> (Coquillett, 1898). | W, E |
|---------------------------------------|------|

Armigeres (Leicesteria)

| | |
|----------------------------------|------|
| <u>magnus</u> (Theobald, 1908). | -, E |
| <u>flavus</u> (Leicester, 1908). | -, E |

Culiseta (Culiseta)

| | |
|--|------|
| <u>alaskaensis</u> ssp. <u>inidca</u> (Edwards, 1920). | W, - |
| <u>niveitaeniata</u> (Theobald, 1907). | W, - |

附表 V - 1 - 13(6)

Culiseta (Allotheobaldia)

longiareolata (Macquart, 1838). W, -

Culex (Lutzia)

fuscans Wiedemann, 1820. W, E

halifaxii Theobald, 1903. * W, E

Culex (Barraudius)

modestus Ficalbi, 1889. W, -

Culex (Neoculex)

brevipalpis (Giles, 1902). -, E

quettensis Mattingly, 1955. W, -

Culex (Mochthogenes)

malayi (Leicester, 1908). W, -

Culex (Lophoceraomyia)

minutissimus (Theobald, 1907). W, -

Culex (Culiciomyia)

nigropunctatus Edwards, 1926. -, E

pallidothorax Theobald, 1905. W, E

viridiventer Giles, 1901. W, -

Culex (Culex)

afridii Qutubuddin, 1956. -, E

barraudi Edwards, 1922. W, -

bitaeniorhynchus Giles, 1901. W, E

epidesmus (Theobald, 1910). W, E

fuscocephalus Theobald, 1907. W, E

gelidus Theobald, 1901. W, E

mimeticus Noe, 1899. W, -

* *Culex raptor* synonymized with *C. halifaxii*.

附表V - 1 - 13(7)

| | |
|---|------|
| <u>mimuius</u> Edwards, 1915 | W, B |
| <u>pipiens fatigans</u> Wiedemann, 1928 | W, E |
| <u>pseudovishnui</u> Celless, 1957 | W, E |
| <u>sinensis</u> Theobald, 1903. | -, E |
| <u>sitiens</u> Wiedemann, 1828. | W, E |
| <u>theileri</u> Theobald, 1903. | W, - |
| <u>tritaeniorhynchus</u> Giles, 1901. | W, E |
| <u>univittatus</u> Theobald, 1901. | W, - |
| <u>vagans</u> Wiedemann, 1828. | W, E |
| <u>vishnui</u> Theobald, 1901* . | W, E |
| <u>whitmorei</u> (Giles, 1904). | W, E |

* Culex annulus, synonymized with C. vishnui.

附表V-1-14 indoor resting collection によって捕獲された各月のハマダラカ数
(F. Mahmood and M. B. Macdonald, 1985)

The Relative Abundance of Indoor Resting.
A. culicifacies, A. drephensi, and A. dubpicrus
(Number of mosquitoes per man-hour of collection effort)

| Month | A. culicifacies | | A. stephensi | | A. subpictus | |
|-------------|-----------------|-------|--------------|------|--------------|-------|
| | ♀ | ♂ | ♀ | ♂ | ♀ | ♂ |
| August '83 | 19.28 | 5.30 | 12.55 | 4.00 | 0.95 | 0.25 |
| September | 13.80 | 4.30 | 5.30 | 1.50 | 1.95 | 0.83 |
| October | 22.03 | 8.95 | 6.75 | 4.90 | 10.00 | 6.90 |
| November | 44.09 | 13.97 | 7.78 | 3.23 | 16.17 | 12.33 |
| December | 51.29 | 12.30 | 5.26 | 0.31 | 4.00 | 0.50 |
| January '84 | 26.21 | 0.76 | 1.61 | 0.11 | 0.17 | 0.00 |
| February | 21.36 | 1.30 | 2.25 | 0.04 | 0.00 | 0.00 |
| March | 28.72 | 12.51 | 3.71 | 0.96 | 0.00 | 0.00 |
| April | 37.24 | 17.96 | 16.41 | 7.33 | 0.00 | 0.00 |
| May | 20.14 | 3.42 | 10.91 | 2.56 | 0.00 | 0.00 |
| June | 12.23 | 2.68 | 1.45 | 0.40 | 0.00 | 0.00 |
| July | 45.50 | 7.72 | 3.30 | 0.73 | 0.00 | 0.00 |
| August | 31.15 | 7.86 | 5.43 | 1.50 | 2.79 | 0.28 |
| September | 36.56 | 7.18 | 12.66 | 3.20 | 8.87 | 3.45 |
| October | 26.97 | 18.16 | 8.96 | 3.35 | 20.03 | 14.72 |
| November | 19.97 | 11.08 | 3.21 | 1.27 | 14.25 | 9.67 |
| December | 19.70 | 2.63 | 1.78 | 0.03 | 1.94 | 0.17 |

♀ = female

(PJMR, Vol. 24, 1985)

♂ = male

附表V-1-15 biting collection によって捕獲された各月のハマダラカ数
(F. Mabmood and H. B. Macdonald, 1985)

Biting collections*
(Mosquitoes per host per night)

| Month | A. culicifacies | | A. stephensi | | A. subpictus | |
|-----------|-----------------|---------|--------------|---------|--------------|---------|
| | man | buffalo | man | buffalo | man | buffalo |
| April '84 | 10.3 | N. D. | 0.7 | N. D. | 0.0 | N. D. |
| May | 2.0 | 125.3 | 1.3 | 269.3 | 0.0 | 0.0 |
| June | 0.0 | 51.7 | 0.0 | 65.7 | 0.0 | 0.0 |
| July | 2.7 | 60.5 | 0.0 | 27.5 | 0.0 | 1.0 |
| August | 4.6 | 89.5 | 0.3 | 18.7 | 0.1 | 3.5 |
| September | 0.5 | 16.2 | 0.3 | 74.2 | 0.0 | 42.3 |
| October | 2.6 | 39.5 | 0.1 | 62.0 | 0.1 | 62.5 |
| November | 12.4 | 136.5 | 0.1 | 13.0 | 0.1 | 21.0 |
| December | 0.8 | 45.0 | 0.0 | 7.5 | 0.0 | 12.5 |

* Man biting 'rates' represent an average of 16 man-nights of collection effort per month.

* Buffalo biting 'rates' represent an average of 4 man-nights of collection effort per month.

(PJMR, Vol. 24, 1985)

附表V-1-16 各州におけるマラリア伝播能力別のsub-sector数とその人口 (1985)

CLASSIFICATION OF MALARIOUS AREAS ACCORDING TO MALARIOGENIC POTENTIAL (RURAL):

| MALARIOGENIC POTENTIAL | | | | | | |
|------------------------|-------------|------------|------------|-----------|------------|--|
| Province | G. R. Data | High | Medium | Low | Total | |
| PUNJAB | Sub-sectors | 1,609 | 344 | 86 | 2,039 | |
| | Houses | 6,173,555 | 1,331,100 | 328,936 | 7,833,591 | |
| | Population | 31,322,714 | 6,753,493 | 1,668,868 | 39,745,075 | |
| SIND | Sub-sectors | 479 | 39 | 45 | 563 | |
| | Houses | 1,570,030 | 127,848 | 147,512 | 1,845,390 | |
| | Population | 8,470,925 | 689,748 | 795,855 | 9,956,528 | |
| N. W. F. | Sub-sectors | 72 | 373 | 181 | 626 | |
| | Houses | 219,564 | 1,153,722 | 559,820 | 1,933,106 | |
| | Population | 1,084,102 | 5,695,034 | 2,763,579 | 9,542,715 | |
| BALUCHISTAN | Sub-sectors | 19 | 110 | 63 | 192 | |
| | Houses | 41,113 | 268,442 | 151,577 | 46,132 | |
| | Population | 257,658 | 1,681,885 | 949,422 | 2,888,965 | |
| TOTAL | Sub-sectors | 2,179 | 866 | 375 | 3,420 | |
| | Houses | 8,032,757 | 2,865,190 | 1,175,272 | 12,073,219 | |
| | Population | 41,669,527 | 14,517,266 | 5,946,488 | 62,133,283 | |

(Annual Report, 1986-1987, Directorate of Malaria control GOP)

資料IV - 1

EPIDEMIOLOGICAL DETAILS CONCERNING AIDS CASES AND HIV POSITIVE
PERSONS DETECTED IN PAKISTAN BY APRIL 1988

A. AIDS CASES

Case 1: 32 years old Tanzanian seaman was brought to emergency unit in Karachi hospital in serious conditions (severely anemic, dehydrated with high fever and hypotension on 13 January 1987. Later developed pneumonia, haematemesis and melena. He had lymphopenia and X-ray showed pneumonitis. Despite symptomatic treatment he expired on 22 January 1987. Serum specimen showed strong reaction to HIV on EIA. Same sample was brought to the NIH, Islamabad, and was confirmed on the Western blot. Close contacts in hospital were negative on testing for HIV antibodies.

Case 2: 31 years old Pak-Canadian returned to Karachi from Canada (Calgary) in November 1987. In December 1987 he visited a dentist who, alarmed by oropharyngeal candidiasis (thrush), initiated further testing. Patient stayed in Canada for last 15 years living with Canadian male who suffered and died from AIDS. Patient was hospitalized for pulmonary tuberculosis in Canada in April 1986 and again in October 1986, when HIV positivity was first detected. Serum specimen collected in Karachi hospital showed strong reaction to HIV on EIA which was confirmed on the Western blot in NIH, Islamabad in March 1988. Patient died second week of March 1988. Close contacts were negative on testing for HIV antibodies.

Case 3: 35 years old Tanzanian Seaman reported himself in Karachi hospital having persistent cough, breathlessness, prolonged fever, chronic diarrhoea, weight loss, generalized lymphadenopathy in February 1988. Later he developed pneumonia and died on 5 March 1988. Serum specimens showed strong reaction to HIV on EIA which was confirmed on the Western blot in NIH, Islamabad. Close contacts in hospital were negative on testing for HIV antibodies.

Case 4: 35 years old Pakistani female returned from Qatar, where she worked as house-maid for the last 15 years. There she got blood transfusion 6 years ago. In Qatar she complained of dysphagia, pain in chest and neck. Later, Candida esophagitis was diagnosed by laboratory. She was departed from Qatar and found to be HIV seropositive in Karachi in August 1987. The EIA test result was confirmed on the Western blot in NIH Islamabad. She is presently hospitalized in District Teaching Hospital in Lahore. She and her family were counselled her close contacts are under surveillance.

Case 5. 25 years old Kenyan sailor reported himself on 14th April in Karachi Civil Hospital, having persistent cough, high fever, loss of weight of 1 month duration. He

has supraclavicular and bilateral inguinal lymphadenopathy since February 1988. Laboratory and RTG investigations showed marked lymphopenia (151) and bilateral pulmonary tuberculosis. Serum specimen showed strong reaction to HIV on EIA and was confirmed on the Western blot. The patient being looked after at the Civil Hospital Karachi.

B. OTHER HIV SEROPOSITIVE PERSONS

Cases 1, 2, 3 : A family (mother, son and daughter) returning from Dubai to Rawalpindi reported for the HIV test in February 1986. All three were strongly positive in ELISA and IFAT and were confirmed by Western blot. The mother got blood transfusion in Dubai in 1982, gave birth to daughter ten months later and to son in 1986. After 8 months from the first HIV testing the second child who was then 10

months of age became negative on ELISA and Western blot. The mother and first child do not present any clinical signs. Her husband and other close contacts are all negative. All have been counselled and are regularly followed-up every 3 months.

Case 4-10: Four coded serum samples were received by NIH, Islamabad from Agha Khan Hospital, Karachi and three coded serum samples from Jinnah Postgraduate Medical Centre, Karachi between June 1987 - March 1988. All samples showed strong reaction to HIV on EIA and were confirmed by Western blot. The only information available suggests that these samples were taken from persons coming from abroad (Pakistanis living now in Britain) who left Pakistan after spending few days in Karachi.

Cases 11-12: A mother of three children returning from United Arab Emirates (UAE) reported on 22 November 1987 for HIV testing. The mother and her 9 months old baby were found HIV positive on the Western blot. She had abortion in 1981 during which she had 2-units blood transfusion in hospital in UAE.

Cases 13-14: In December 1987, two Americans, kept police custody on drug trafficking charges claimed to be HIV positive. Their blood specimens were tested and found positive on the Western blot. Both traffickers left the country one week later.

出典 : Note for Record on Discussion between MOH, Government of Pakistan and WHO AIDS

Tem, Islamabad, 19-28, April 1988

資料VII-1 農村部(落)と都市部の人口比較

| | 1972 | | | 1981 | | |
|-------------|---------------------|---------------------|-------|---------------------|---------------------|-------|
| | urban (×1000)(%) | rural (×1000)(%) | total | urban (×1000)(%) | rural (×1000)(%) | total |
| Punjab | 9260 (24.5) | 28585 (75.5) | 37845 | 13255 (27.8) | 34377 (72.2) | 47632 |
| Sind | 5726 (40.4) | 8430 (59.6) | 14156 | 8243 (43.3) | 10786 (56.7) | 19029 |
| NWFP | 1196 (14.3) | 7193 (85.7) | 8389 | 1665 (15.1) | 9396 (84.9) | 11061 |
| Baluchistan | 399 (16.4) | 2029 (83.6) | 2428 | 677 (15.6) | 3655 (84.4) | 4337 |
| FATA | 13 (5.2) | 2478 (94.8) | 2491 | -- | -- | 2199 |
| Total | 16594 (25.4) | 48715 (74.6) | 65309 | 23840 (28.3) | 60413 (71.7) | 84253 |

Source : Statistical Year Book, 1986

資料VII-2 農村部における飲料水普及に関する計画 (1986-1993)

Summary of Proposed Rural Water Supply Program

FY86 through 93

| | unit | punjab | sind | NWFP | Baluchistan | TOTAL |
|-----------------------------------|------|----------|----------|----------|-------------|----------|
| Total Population | | | | | | |
| 1986 | '000 | 38,226.3 | 12,056.8 | 10,527.4 | 4,072.7 | 64,883.2 |
| 1990 | '000 | 41,866.3 | 13,204.8 | 11,529.9 | 4,460.5 | 71,061.5 |
| 1993 | '000 | 44,822.0 | 14,137.1 | 12,343.8 | 4,775.4 | 76,078.3 |
| Coverage Water Supply | | | | | | |
| 1986 | % | 39.0 | 16.2 | 47.0 | 18.6 | 34.8 |
| 1990 | % | 54.3 | 52.8 | 73.5 | 37.7 | 56.1 |
| 1993 | % | 80.2 | 80.8 | 83.8 | 52.7 | 79.0 |
| Additional Coverage (Pop.) | | | | | | |
| 1986-90 | | | | | | |
| Piped | '000 | 4,422.9 | 2,348.3 | 3,292.0 | 461.3 | 10,524.5 |
| Handpump | '000 | 3,393.3 | 2,671.7 | 226.4 | 462.5 | 6,753.9 |
| 1991-93 | | | | | | |
| Piped | '000 | 3,370.9 | 1,835.3 | 1,746.0 | 415.3 | 7,367.5 |
| Handpump | '000 | 9,823.1 | 2,507.1 | 122.4 | 419.3 | 12,871.9 |
| Capital Cost | | | | | | |
| 1986-90 | | | | | | |
| Piped | M Rs | 2,437.7 | 1,331.8 | 1,179.0 | 369.0 | 5,317.5 |
| Handpump | M Rs | 522.1 | 398.7 | 35.1 | 73.9 | 1,029.8 |
| 1991-93 | | | | | | |
| Piped | M Rs | 1,858.5 | 1,033.7 | 651.3 | 332.2 | 3,875.7 |
| Handpump | M Rs | 1,092.1 | 347.6 | 14.6 | 66.8 | 1,521.1 |

Note: This represents the adjusted estimated upper limit of what could be achieved.

資料VII-3 農村部における飲料水普及計画 (1986-1990)

Current Proposed Water Supply Coverage, FY86-90

| | 1987-1990 Additional Population served | | | | | 1990 Profile Population (X1000) | | | |
|----------------|---|-----------------|--------------|------------------|-----------------|------------------------------------|------------------|-------------------|--|
| | Piped | Add'l HP | Rehab HP | Total | Piped | HP | Unserved | Total | |
| Punjab | 4,422.9 56.6 ('000) % | 3,046.9 39.0 | 346.4 4.4 | 7,816.2 100.0 | 9,010.1 21.5 | 13,714.4 32.8 | 19,141.8 45.7 | 41,866.3 100.0 | |
| Sind | 2,348.3 46.8 ('000) % | 2,193.3 43.7 | 478.4 9.5 | 5,020.0 100.0 | 2,710.0 20.5 | 4,263.2 32.3 | 6,231.6 47.2 | 13,204.8 100.0 | |
| NWFP | 3,392.0 93.7 ('000) % | 208.1 5.8 | 18.3 0.5 | 3,618.4 100.0 | 8,129.3 70.5 | 436.9 3.8 | 2,963.6 25.7 | 11,529.9 100.0 | |
| Baluchistan | 461.3 49.9 ('000) % | 461.3 49.9 | 1.2 0.1 | 923.8 100.0 | 1,206.6 27.1 | 474.7 10.6 | 2,779.2 62.3 | 4,460.5 100.0 | |
| Total Pakistan | 10,624.5 | 5,909.6 | 844.3 | 17,378.4 | 21,056.0 | 18,889.3 | 31,116.2 | 71,061.5 | |

Note: This represents the adjusted estimated upper limit of what could be achieved.

資料VII-4 農村部における飲料水普及計画 (1991-1993)

Additional Current Proposed Water Supply Coverage, FY91-93

| | 1991-1993 | | | | 1993 Profile | | | |
|----------------|--------------------------------|-----------------|-----------------|-------------------|--------------------|------------------|-----------------|-------------------|
| | Additional Population served | | | | Population (X1000) | | | |
| | Piped | Add'l HP | Rehab HP | Total | Piped | HP | Unserved | Total |
| Punjab | (' 000) 3,370.9 25.5 % | 1,828.4 13.9 | 7,994.7 60.6 | 13,194.0 100.0 | 12,381.0 27.6 | 23,537.5 52.5 | 8,903.5 19.9 | 44,822.0 100.0 |
| Sind | (' 000) 1,835.3 42.3 % | 1,614.1 37.2 | 893.0 20.6 | 4,342.4 100.0 | 4,545.3 32.2 | 6,770.3 47.9 | 2,821.5 20.0 | 14,137.1 100.0 |
| NWFP | (' 000) 1,746.0 93.4 % | 39.4 2.1 | 83.0 4.4 | 1,868.4 100.0 | 9,875.3 80.0 | 559.3 4.5 | 1,909.1 15.5 | 12,343.8 100.0 |
| Baluchistan | (' 000) 415.3 49.8 % | 415.3 49.8 | 4.0 0.5 | 834.6 100.0 | 1,621.9 34.0 | 894.0 18.7 | 2,259.5 47.3 | 4,775.4 100.0 |
| Total Pakistan | (' 000) 7,367.5 | 3,897.2 | 8,974.7 | 20,239.4 | 28,423.5 | 31,761.2 | 15,893.6 | 76,078.3 |

HP = Handpump

Note : This represents the adjusted estimated upper limit of what could be achieved.

資料VII-5 農村部における排水設備普及計画 (1986-1993)

Current Proposed Rural Drainage Program FY86 through FY93

| | unit | Punjab | Sind | NWFP | Baluchistan | TOTAL |
|----------------------------|------|---------|---------|---------|-------------|---------|
| Coverage Water Supply | | | | | | |
| 1986 | % | 3.0 | 0.9 | 0.3 | 0.0 | 2.0 |
| 1990 | % | 6.0 | 3.9 | 3.3 | 3.0 | 5.0 |
| 1993 | % | 16.0 | 13.9 | 13.3 | 13.0 | 15.0 |
| Additional Coverage (Pop.) | | | | | | |
| 1986-90 | '000 | 1,365.2 | 405.9 | 348.9 | 133.8 | 2,253.8 |
| 1991-93 | '000 | 4,659.5 | 1,449.6 | 1,261.2 | 487.0 | 7,857.4 |
| Capital Cost | | | | | | |
| 1986-90 | M Rs | 273.0 | 81.2 | 69.8 | 26.8 | 450.8 |
| 1991-93 | M Rs | 931.9 | 289.9 | 252.2 | 97.4 | 1,571.5 |

Note: This represents the adjusted estimated upper limit of what could be achieved.

資料VII-6 Multan地区における水質

| Area | No. of Total sample | No of Samples with higher; | | |
|---------------------------------|---------------------|----------------------------|--------|-------------------------------|
| | | Ca | Mg | Bacteria |
| Muzaffargarh | 10 | 7 | 9 | 2 |
| Dera Ghagi Khan | 6 | 2 | 3 | 6 |
| Yehari | 4 | 3 | 4 | 1 |
| Ali pur | 5 | 4 | 5 | 1 |
| Mailsi | 5 | — | 5 | 2 |
| Kabirwara | 3 | — | 1 | — |
| Khanawal | 3 | 2 | 2 | — |
| Multan City | | | | |
| (a) Hand pump | 45 | 21 | 34 | 14 |
| (b) Municipal Corporaotion Tank | 10 | 1 | 4 | 2 |
| Jehanian | 6 | — | 1 | 2 |
| WHO - Criteria | | 75 mg/l | 50mg/l | Viablc count 300-600/100ml |

Source ; Prof. M. Hayat Zafar. 他, Analysis of Water From Different Areas of Multan.

資料VII-7 生肉の汚染細菌

Type of Bacterial Isolates from Beef Samples of Sihala Slaughter House and the Meat Shops of Rawalpindi.

| Type of Isolates | 150 beef samples from slaughter house No. of Isolates | Percentage | 150 beef samples from the meat shops No. of Isolates | Percentage |
|-----------------------------------|--|------------|---|------------|
| Coliforms | 120 | 22.55 | 135 | 17.73 |
| <i>Pseudomonas</i> spp. | 15 | 2.82 | 105 | 13.80 |
| <i>Proteus</i> spp. | 41 | 7.70 | 80 | 10.51 |
| <i>Serratia</i> spp. | 50 | 9.40 | 65 | 8.55 |
| <i>Salmonella typhimurium</i> | 31 | 5.83 | 41 | 5.38 |
| <i>Staphylococcus aureus</i> | 25 | 4.70 | 37 | 4.86 |
| <i>Staphylococcus epidermidis</i> | 70 | 13.15 | 95 | 12.48 |
| <i>Streptococcus faecalis</i> | 60 | 11.28 | 70 | 9.20 |
| <i>Bacillus subtilis</i> | 90 | 16.92 | 95 | 12.48 |
| <i>Bacillus cereus</i> | 20 | 3.76 | 25 | 3.28 |
| <i>Clostridium perfringens</i> | 10 | 1.88 | 13 | 1.70 |

Source : Dr. A. Bari, Quaid-i-Azam University.

RECOMMENDATIONS

In order to check the bacterial contamination some of the useful practices could be : -

- separate handling of raw and cooked foods
- care of foods after cooking, it is essential to cool the foods quickly by refrigeration and to consume freshly cooked foods if possible

Some of other measures which would greatly help in reduction of food contamination are : -

- care of hands by washing after use of WC and before touching the prepared foods.
- while working on raw food, prepared food must not be handled without proper hand wash.
- prepared food should not be touched bare handed because even washing can not remove streptococci, instead proper use of kitchen tools be practiced to handle the prepared food.
- food handler having any septic lesion on the body should not be permitted to handle foods. Even minor abrasions on hands should be covered with water proof dressing.
- flies, rats, mice and other insect pests should be eliminated from food processing areas
- cleaning of environment, equipment, food and drinking container and utensils with good detergents be practiced.
- for cleaning very hot water should be used. Cleand utensils should not be wiped with dirty cloth, instead to render the utensils dry disposable paper cloth may be used.
- rapid cooling and cold storage of food not intended to be eaten immediately after cooking, is essential

資料IX-1 最近10年間のPMRCのセミナーとワークショップ
(1975-1985)

-
1. National seminar on classification of tumours, Karachi, 27-30 October, 1975.
 2. National seminar on liver disease, Karachi, 4-6 April, 1977.
 3. National seminar on communicable diseases, Islamabad, 28-29 January, 1979.,
 5. National seminar on medical research on national health problems, Islamabad, 23-24 August, 1980.
 6. Workshop on clinical pharmacology, Rawalpindi, 27th September to 1st October, 1980.
 7. Regional workshop on research management, Islamabad, April, 1981.
 8. Workshop on country coverage study, Islamabad, May 26-June 2, 1982.
 9. Medical research congress at Peshawar, November 6-7, 1982.
 10. Medical research congress at Islamabad 3-4, December, 1984.
 11. Meeting on "Requirements and needs of a National workshop on training of medical scientists on medical research managements" 29th July-1st August, 1985(Lahore).
 12. Workshop on research management, 29th August-1st September, 1985(Lahore).
 13. Internal Seminar at PMRC Research Centre, Abbottabad-8th August, 1985.
 14. Internal Seminar at PMRC Research Centre Peshawar, 29th September, 1985.
 15. Internal Seminar at PMRC Research Centre Quetta, 23rd November, 1985.
 16. Internal Seminar at PMRC Research Centre, Faisalabad, 6th November, 1985.
-

Source : PMRC -プロフィール (1986)

資料IX-2 PMRC発行の単行書と技術レポート

-
1. Introduction to statistics in medical research (1974).
 2. Presentation of data in medical research (1975).
 3. Proceedings the national seminar on liver diseases (1976).
 4. Collection of data of various types of tumors in Pakistan (1977).
 5. Introducing PMRC (1979).
 6. Pilot study for generating base line data on medical education (1980).
 7. Compilation of reprints of published articles (1980).
 8. Multicentre study of risk factors for coronary heart disease (1980).
 9. Directory of medical research projects in Pakistan 1976-80 (1980).
 10. Research work on national health problems.
 11. A four year review of research work carried out by PMRC (1980).
 12. Proceedings of the seminar on national health problems (1980).
 13. Proceedings of the workshop on clinical pharmacology (1980).
 14. Malignant tumours in Pakistan. A report of multicentre study (1982).
 15. Proceeding of medical research congress (1982).
 16. Availability and utilization of health services in a semi Urban area (1982).
 17. PMRC-A Profile (1982).
 18. Diabetes mellitus in Pakistan. A seven years study in retrospect (1983).
 19. Role of statistics in medical research (1984).
 20. Manual of normal health parameters in Pakistan (1984).
 21. Financial instructions and guidelines (1984).
 22. PMRC-A Profile (1984).
 23. Proceedings of the medical research congress: (1984).
 24. Hypertension (1986).
-

Source : PMRC-プロフィール (1986)

資料IX-3 PMRCセンターの実験室設備

—パンジャブ医科大学・ファイサラバードの場合—

| LABORATORY EQUIPMENT | Quantity |
|--|----------|
| 1. Selecta Rinser Spray Gun | 1 |
| 2. Markson pH Meter (Model 4401 F) | 1 |
| 3. Bausch & Lomb Spectronic-21 Spectrophotometer (Digital). Model UV-D 200-1000 nm | 1 |
| 4. Bausch & Lomb Spectronic-21 Spectrophotometer (Needle Type). Model MV 340-1000 nm | 1 |
| 5. Karl Kaps Binocular Research Microscope | 1 |
| 6. Bosch Single Pan Electric Analytical Balance | 1 |
| 7. Markson Spinmark Stirrer | 2 |
| 8. Hettich Laboratory Centrifuge (Eba 3S) | 2 |
| 9. Hettich Laboratory Centrifuge (Eba III) | 1 |
| 10. Water Still (GFL) | 1 |
| 11. National Airconditioner (2 ton) | 2 |
| 12. National Refrigerator (14 cu ft.) | 1 |
| 13. Indesit Deep-Freezer | 1 |
| 14. Haemocytometer | 1 |
| 15. Haemoglobinometer | 1 |
| 16. Weighing Machine (Seca) | 1 |
| 17. Revolving/Adjustable Stool | 12 |
| 18. Fume Cupboard | 1 |
| 19. Wire Cage (Rats) Stand | 1 |
| 20. Wire Cage for Rats | 20 |

Source : PMRC Research Centre, Punjab Medical College, Faisalabad, An Introduction, 1986.

資料IX-4 PMRCセンターの運営予算
—パンジャブ医科大学・ファイサラバードの場合—

| FINANCIAL YEAR | DEVELOPMENT | NON-DEVELOPMENT | OTHER ALLOWANCES (MEDICAL) | TOTAL |
|----------------|--------------|-----------------|----------------------------|--------------|
| 1982-83 | Rs. 6,83,100 | Rs. 2,31,900 | Rs. 15,000 | Rs. 9,30,000 |
| 1983-84 | Rs. 40,000 | Rs. 1,71,300 | Rs. 15,300 | Rs. 2,26,600 |
| 1984-85 | Rs. 30,000 | Rs. 2,12,200 | Rs. 25,000 | Rs. 2,67,200 |
| 1985-86 | Rs. 40,000 | Rs. 2,36,602 | Rs. 20,000 | Rs. 2,96,602 |
| 1986-87 | | Rs. 3,68,399 | Rs. 29,040 | |

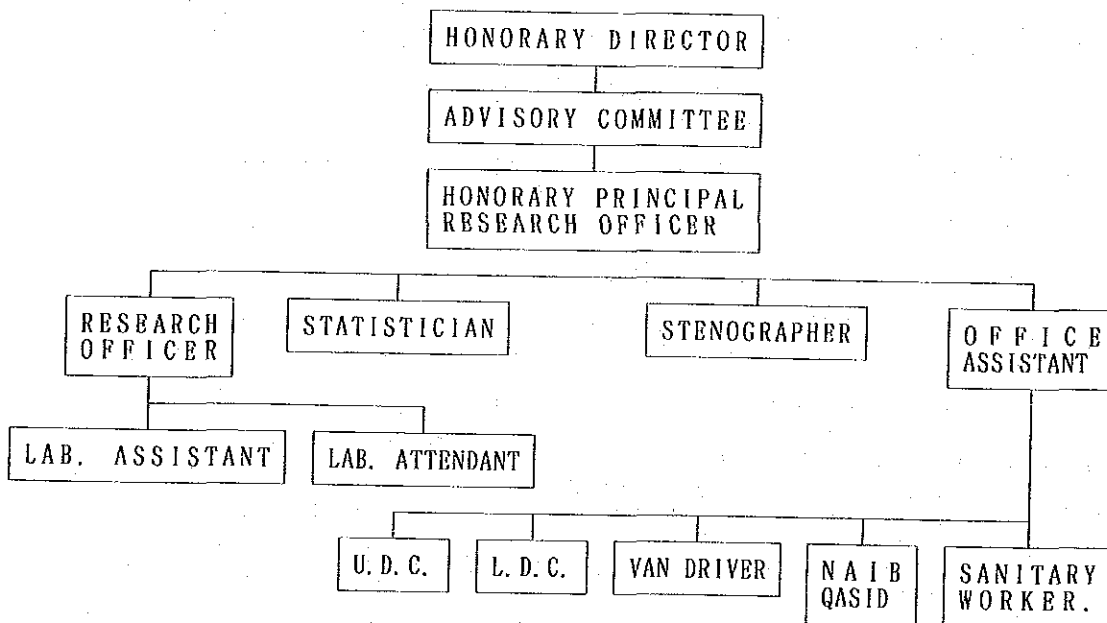
Source : 資料IX-3に同じ

資料IX-5 PMRCセンターの組織構成
—パンジャブ医科大学・ファイサラバードの場合—

ORGANIZATIONAL SET-UP

PMRC RESEARCH CENTER, PUNJAB MEDICAL COLLEGE,

F A I S A L A B A D



Source : 資料IX-3に同じ

資料IX-6 PMRCの各センターにおけるプロジェクト一覧(1)

| PMRCセンター | プロジェクト |
|---|---|
| 1 Jinnah Postgraduate Medical Centre, Karachi | <ol style="list-style-type: none"> 1. Perinatal transmission of hepatitis B. 2. Endoscopic sclerotherapy for bleeding oesophageal varices. 3. Laparoscopy in the diagnosis of hepatobiliary disorders. 4. BCG status in Karachi schools. 5. Gall bladder cancer in Karachi-A case control study. 6. Classification of leukemias and lymphomas using cell markers and cytochemical techniques. 7. Plasma vitamin A and carotene levels in patients with tumours of the liver. 8. To establish base line data on B complex vitamins. 9. Preliminary study on nutrition and cancer. |
| 2 F. J. Medical College, Lahore | <ol style="list-style-type: none"> 1. Prospective long term study of newly diagnosed diabetics. The role of control and modality of treatment in relation to complications, using HBAIC levels as indicator of blood glucose control. 2. Micro Albuminuria as a predictor of clinical Nephropathy in insulin and non-insulin dependent Diabetes Mellitus. 3. Diagnosis and management of diabetic autonomic neuropathy. 4. Relationship of lipoprotein lipid to mild fasting hyperglycemia and diabetes in pregnancy. 5. Screening for common Bacterial and protozoal Pathogens in patients with mild to moderate diarrhoea of short duration in out-patient setting. 6. Study of serum lipids and blood pressure in Adolescents. 7. Epidemiological study of blood pressure pattern and prevalence of diabetes in various regions of Pakistan. A proposed multicentre study. 8. Problem of Psychotropic drug abuse in male students of Lahore. |
| 3 Khyber Medical College, Peshawar | <ol style="list-style-type: none"> 1. Otogenic intra cranial abscess. 2. Study of antituberculous prescribing patterns and patients compliance with therapy. 3. Deafness in school going children. 4. Diabetes mellitus in community. 5. Study of Enteric Fever. 6. Study of post operative wound infections in surgical unit. |

| PMRCセンター | プロジェクト |
|-------------------------------------|--|
| | <ol style="list-style-type: none"> 7. Nutritional status assessment of pregnant and lactating women. 8. Health services research project. 9. Cystic Fibrosis research in infants and children. 10. Role of G6PD deficiency in Neonatal Jaundice. 11. Research on the value of indigenous herbs and drugs. 12. Pharmacokinetics of Theophylline in Patients with acute and chronic obstructive airways disease. 13. Evaluation of available laboratory investigations for the diagnosis of Meningitis in children. 14. Relationship of blood pressure with age, weight, and ponderal index in school children. 15. Study of the prevalence of subacute bacterial endocarditis in patients suffering from valvular Heart Disease. |
| 4 N. I. H. Islamabad | <ol style="list-style-type: none"> 1. Role of atypical mycobacteria in human disease, specially in adult, children and their drug resistance. 2. Collection and categorization of different seasonal pollens for pollen-allergy vaccine against pollenosis. 3. Study for the occurrence of Hepatotoxic Pyrolizidine Alkaloids in some medical herbs of Pakistan. 4. Susceptibility/resistance of malaria vectors to insecticide. 5. Frequency of the various types of viral hepatitis in acute phase of illness (Hepatitis A, B & C, non-A non-B). |
| 5 Liaquat Medical College, Jamshoro | <ol style="list-style-type: none"> 1. Basal Cell Carcinoma (Rodent Ulcer) and methods of re-construction after excision. 2. Cleft Lip & Palate Surgery and results of repair comparable with other statistics. 3. To determine emergence of resistant strains to Anti T. B. Drugs. 4. <ol style="list-style-type: none"> i) Viral Hepatitis/Types. Comparative study of treatment (with & without cortisone). ii) AU-Antigen Carrier Rate in: <ol style="list-style-type: none"> (a) General population. (b) Professional donors. (c) Health personnel. (d) Relatives of patients. |

PMRCセンター

プロジェクト

6 Bolan Medical College, Quetta.

1. Angiofibroma, geographical distribution and clinical aspects in Baluchistan, early detection and mode of treatment.
2. Multicentre study of urinary lithiasis.
3. Etiology of Lymphadenopathy in Children in Baluchistan.
4. Incidence and Clinical pattern of diabetes mellitus in adults and children in Baluchistan.
5. Chemotherapy in Leukaemia.
6. Review of 200 cases of epistaxis and its management.
7. Review of 200 cases of Hoarsness of voice and its management.
8. Survey of chronic Suppurative Otitis media and results of 100 cases of closed and open cavity surgery.
9. Basic health data of Pakistani children and adults, males & females in Baluchistan.
10. Epidemiology of Cutaneous Leishmaniasis.
11. Incidence of tuberculosis of Larynx and its management in Quetta District.

7 Ayub Medical College, Abbottabad

1. Effect of light on aging process of the coronary artery.
2. Histochemical evaluation of selected normal benign Neoplastic & malignant neoplastic human tissues.
3. Chronic tonsillitis histopathological diagnosis.
4. Incidence of Haemoglobinopathies in Hazara.
5. Role of physicians in health promotion-A Survey of PCP.
6. A study of classical blood groups and Anti-D (Rh) in local population.
7. Prevalence of hypertension among young girls and boys.
8. Basic/normal health data of Pakistanis (5-15 years) old.
9. Prevalence of urinary tract:infection during pregnancy.
10. Acute respiratory infection in children under 5 years of age.
11. Use of prophylactic antibiotics in clean surgical cases.
12. Serum Ca⁺⁺ level in normal and hypertensive patients.
13. A survey of haemoglobin, serum, total protein, iron and folic acid status of pregnant women in district Abbottabad.
14. Bacteriological and Bio-chemical study of Urine of Neonates.

| PMRCセンター | プロジェクト |
|--|--|
| 8 Quaid-e-Azam Medical College, Bahawalpur | <ol style="list-style-type: none"> 1. Study of birth weights. 2. Antilipemic and antihypertensive and anti-diabetic properties of garlic (<i>Allium-sativum</i>). |
| 9 Chandka Medical College, Larkana | <ol style="list-style-type: none"> 1. Limbal section cataract surgery. 2. Surgical management of liver diseases at CMC Hospital Larkana. 3. Urolithiasis Chandka Medical College Hospital, Larkana. 4. Bacteriological examination of 100 cases of pleural effusion in Chandka Medical College Hospital, Larkana. 5. Occular infections. 6. A Study of prevalence of HBs Ag in the jaundiced patients and their family members. 7. To establish Hb % of people of Larkana in varying age groups. |
| 10 Army Medical College, Rawalpindi | <ol style="list-style-type: none"> 1. Malignant Lymphoma of Hodgkins type incidence and pattern of the disease in Pakistan. 2. A clinicopathological study of infectious Hepatitis. 3. A study of dyspepsia in Pakistan based on correlation of signs and symptoms with aetiology and response to therapy. 4. Incidence, causative organisms and their histological diagnosis in Mycetoma Foot in Pakistan. 5. Incidence of ABO and Rh blood group in Pakistani population. 6. The study of the pattern of serum proteins in viral hepatitis and nephrotic syndrome (2nd Part). 7. A comprehensive study of carcinoma breast. 8. Welfare of pregnant diabetics (2nd phase). 9. Role of acupuncture in post-operative pain. 10. A clinicopathological study of liver disease in children. 11. Determination of secretor status in medical cadets using saliva. |

ON-GOING RESEARCH PROJECTS

| PMRCセンター | プロジェクト |
|----------|--|
| 11 | Punjab Medical College, Faisalabad |
| | <ol style="list-style-type: none">1. Two dose glucose tolerance test as employed to study glucose tolerance response in offspring of diabetic parents vs those of non-diabetic parents.2. Prevalence of ectopic pregnancy due to pelvic infection.3. Medication attitudes : A survey of Faisalabad.4. <i>Bio-statistics of D.H.Q. Hospital, Faisalabad.</i> |
| 12 | Health Services Research Centre, Islamabad |
| | <ol style="list-style-type: none">1. Vital Rates.2. Cost of health services in poly clinic, Islamabad.3. Evaluation of Rural health system.4. Smoking habits in Federal Government Servants at Islamabad- 1986. |

Source : PMRC -プロフィール (1986) から抜粋して作成した。

資料IX-7 科学研究・技術開発経費
の年次推移

| Year | Amount in Million |
|---------|-------------------|
| 1964-65 | 59.55 |
| 1965-66 | 54.81 |
| 1966-67 | 57.52 |
| 1967-68 | 57.88 |
| 1968-69 | 62.40 |
| 1969-70 | 71.36 |
| 1970-71 | 80.75 |
| 1971-72 | 91.19 |
| 1972-73 | 95.97 |
| 1973-74 | 116.19 |
| 1974-75 | 176.48 |
| 1975-76 | 224.53 |
| 1976-77 | 228.84 |
| 1978-79 | 336.45 |
| 1979-80 | 367.10 |
| TOTAL | 1437.39 |

Source : Science Technology and Development,
Vol 6, PP37-41, 1987.

資料IX - 8 分野別科学研究プログラムと予算配分

(Rupees in Million)

| Sub-Sector | ADP 1983-84 | ADP 1984-85 | ADP 1985-86 |
|---|-------------|-------------|-------------|
| A. MINISTRY OF SCIENCE AND TECHNOLOGY. | | | 4,989 |
| 1. Pakistan Council of Scientific and Industrial Research | 26 | 43 | 38.146 |
| 2. Appropriate Technology Development organization | 4 | 6 | 7.164 |
| 3. National Institute of Electronics | 8 | 11 | 18.188 |
| 4. Pakistan Council of Research in Water Resources | 8 | 8 | 8.239 |
| 5. Pakistan Science Foundation | 2 | 8 | 11.293 |
| 6. Pakistan Medical Research Council | 6 | 6 | 8.164 |
| 7. Council for Works & Housing Res | 2 | 4 | 4.536 |
| 8. National Institute of Power | 2 | 4 | 3.536 |
| 9. Other minor projects of Ministry of Science and Technology | 11 | 25 | 39.191 |
| Sub-Total(Ministry of Science & Tech) | 69 | 115 | 141.466 |
| B. AGRICULTURE RESEARCH DIVISION(PARC) | | | |
| 10. Strengthening of Agriculture Research capabilities in Pakistan. | 35 | 40 | |
| 11. Pak. Agriculture Research Development Project. | 72 | 62 | 83.00 |
| 12. Barani Agriculture Research & Development Project | 32 | 28 | 1.00 |
| 13. Other Minor Projects | 50 | 80 | 175.50 |
| Sub-Total(PARC) | 189 | 210 | 259.5 |
| C. EDUCATION DIVISION | | | |
| 14. Improvement of Science Education/ Equipment | 9 | 10 | |
| 15. Institute of Science & Technology | | | |
| D. MINISTRY OF WATER AND POWER | | | |
| 16. Institute of Water Logging and Salinity | 9 | 10 | |
| E. MINISTRY OF PETROLEUM & MINERAL RESOURCES | | | |
| 17. DGER(Director General Energy Resources) | 43 | 30 | 38.3 |
| 18. HDIP(Hydrocarbon Development Institute of Pakistan) | 4 | 5 | 13.2 |
| F. COMMERCE DIVISION | 3 | | |
| TOTAL(S&T) | 326 | 380 | 452.466 |

Source : 資料IX - 7 に同じ

資料IX-9 シェーク・ザイド病院の生理機能検査数

| Procedures | 1986 | | | | | | | | | | | | 1987 | | | | | | | | | | | | TOTAL | Ave/month |
|--------------------------------|-------|------|------|------|------|------|--------|--------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|---------|------|------|-------|-----------|
| | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | March. | April. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | March. | April. | May | June | July | Aug. | | |
| Echocardiogram O.P.D. | Nil | 17 | 18 | 22 | 18 | 14 | 22 | 24 | 14 | 21 | 170 | Nil | 17 | 18 | 22 | 18 | 14 | 22 | 24 | 14 | 21 | 170 | | | | |
| Echocardiogram Indoor | Nil | 47 | 30 | 38 | 57 | 46 | 35 | 45 | 32 | 64 | 394 | Nil | 47 | 30 | 38 | 57 | 46 | 35 | 45 | 32 | 64 | 394 | | | | |
| Exercise Tolerance Test O.P.D. | Nil | 5 | 6 | 12 | 14 | 12 | 13 | 14 | 18 | 5 | 99 | Nil | 5 | 6 | 12 | 14 | 12 | 13 | 14 | 18 | 5 | 99 | | | | |
| Exercise Tolerance Test Indoor | Nil | 15 | 4 | 4 | 13 | 17 | 14 | 18 | 12 | 26 | 123 | Nil | 15 | 4 | 4 | 13 | 17 | 14 | 18 | 12 | 26 | 123 | | | | |
| Holter Mointoring O.P.D. | Nil | 2 | 2 | - | 2 | 3 | 4 | 5 | 5 | 3 | 26 | Nil | 2 | 2 | - | 2 | 3 | 4 | 5 | 5 | 3 | 26 | | | | |
| Holter Mointoring Indoor | Nil | 11 | 13 | 11 | 13 | 18 | 8 | 22 | 14 | 17 | 127 | Nil | 11 | 13 | 11 | 13 | 18 | 8 | 22 | 14 | 17 | 127 | | | | |
| Pulmonary Function Test O.P.D. | Nil | 11 | 4 | 4 | 1 | 8 | 5 | 3 | 1 | 8 | 45 | Nil | 11 | 4 | 4 | 1 | 8 | 5 | 3 | 1 | 8 | 45 | | | | |
| Pulmonary Function Test Indoor | Nil | 15 | 16 | 21 | 13 | 7 | 7 | 32 | 19 | 13 | 143 | Nil | 15 | 16 | 21 | 13 | 7 | 7 | 32 | 19 | 13 | 143 | | | | |
| E.C.G.O.P.D. | Nil | 431 | 372 | 375 | 480 | 355 | 452 | 517 | 360 | 442 | 3,784 | Nil | 431 | 372 | 375 | 480 | 355 | 452 | 517 | 360 | 442 | 3,784 | | | | |
| E.C.G. Indoor | Nil | 675 | 645 | 935 | 901 | 980 | 816 | 773 | 1,334 | 800 | 7,859 | Nil | 675 | 645 | 935 | 901 | 980 | 816 | 773 | 1,334 | 800 | 7,859 | | | | |
| Total | | | | | | | | | | | | 1,229 | 1,110 | 1,422 | 1,512 | 1,460 | 1,376 | 1,458 | 1,809 | 1,899 | 12,770 | 1,277.0 | | | | |

資料IX-10 シェーク・ザイド病院、生化学検査数

| Tests | 1986 | | | | | | | | | | | | 1987 | | | | | | | | | | | | Total | Ave/month |
|--------------|-------|------|------|-------|---------|----------|-------|-------|-------|-------|--------|------|-------|------|-------|-------|---------|----------|-------|-------|-------|--------|------|------|-------|-----------|
| | Sept. | Oct. | Nov. | Dec. | January | February | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | January | February | March | April | May | June | July | Aug. | | |
| Bun | - | - | 208 | 671 | 636 | 213 | 928 | 1,057 | 889 | 1,271 | 5,873 | - | - | 208 | 671 | 636 | 213 | 928 | 1,057 | 889 | 1,271 | 5,873 | | | | |
| Creatinine | - | - | 208 | 671 | 636 | 213 | 928 | 1,057 | 889 | 1,271 | 5,873 | - | - | 208 | 671 | 636 | 213 | 928 | 1,057 | 889 | 1,271 | 5,873 | | | | |
| Uric Acid | - | - | 208 | 671 | 636 | 213 | 928 | 408 | 73 | 186 | 3,323 | - | - | 208 | 671 | 636 | 213 | 928 | 408 | 73 | 186 | 3,323 | | | | |
| T. Bilirubin | - | - | 208 | 671 | 636 | 213 | 928 | 85 | 158 | 146 | 3,045 | - | - | 208 | 671 | 636 | 213 | 928 | 85 | 158 | 146 | 3,045 | | | | |
| Glucose | - | - | - | 200 | Nil | Nil | Nil | Nil | Nil | 934 | 1,134 | - | - | - | 200 | Nil | Nil | Nil | Nil | Nil | 934 | 1,134 | | | | |
| Total | - | - | 832 | 2,884 | 2,544 | 852 | 3,712 | 2,607 | 2,009 | 3,808 | 19,248 | - | - | 832 | 2,884 | 2,544 | 852 | 3,712 | 2,607 | 2,009 | 3,808 | 19,248 | | | | |

* 1986年9月, 10月を除いた平均値

資料IX-11 シェーク・ザイド病院、血液銀行の月別検査数

| DESCRIPTION | 1986 | | | | | | | | | | | | 1987 | | | | | | | | | | | | TOTAL | Ave/month | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|------|------|------|------|------|------|------|-------|-------|------|-------|-----------|--------|
| | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | | | |
| Total Blood Groupings. | Nil | 742 | 799 | 794 | 969 | 1,065 | 1,174 | 1,020 | 982 | 1,220 | | | | | | | | | | | | | | | | 8,765 | 876.5 |
| Total Compatibility Test. | Nil | 302 | 360 | 359 | 386 | 491 | 456 | 433 | 429 | 474 | | | | | | | | | | | | | | | | 3,690 | 369.0 |
| Total number of donors. | Nil | 247 | 287 | 250 | 295 | 392 | 369 | 347 | 342 | 393 | | | | | | | | | | | | | | | | 2,922 | 292.2 |
| Total number of Haemoglobin estimations done. | Nil | 94 | 95 | 237 | 290 | 377 | 358 | 273 | 320 | 381 | | | | | | | | | | | | | | | | 2,425 | 242.5 |
| Total number of RPR Slide test for Syphilis done. | Nil | 89 | 95 | 238 | 290 | 369 | 399 | 313 | 309 | 361 | | | | | | | | | | | | | | | | 2,463 | 246.3 |
| Total number of HB. Ag test done. | - | 91 | 95 | 189 | 85 | 204 | 399 | 313 | 303 | 361 | | | | | | | | | | | | | | | | 2,040 | 204.0 |
| Packed Cells. | Nil | 21 | 23 | 23 | 20 | 28 | 49 | 27 | 22 | 40 | | | | | | | | | | | | | | | | 253 | 25.3 |
| Plasma supplied. | Nil | Nil | 2 | Nil | 1 | 5 | 4 | 6 | 2 | 1 | | | | | | | | | | | | | | | | 21 | 2.1 |
| Platelet concentrate. | Nil | Nil | Nil | Nil | 5 | 13 | 3 | 2 | 2 | Nil | | | | | | | | | | | | | | | | 25 | 2.5 |
| W.B.C. Concentrate | Nil | Nil | Nil | Nil | Nil | Nil | 3 | 4 | Nil | Nil | | | | | | | | | | | | | | | | 7 | 0.7 |
| Direct Coombs tests. | Nil | 7 | 13 | 13 | 29 | 50 | 31 | 14 | 16 | 6 | | | | | | | | | | | | | | | | 179 | 17.9 |
| Indirect Coombs tests. | Nil | 13 | 13 | 15 | 4 | 6 | 13 | 13 | 11 | 3 | | | | | | | | | | | | | | | | 91 | 9.1 |
| Rh Antibody titration | Nil | Nil | 1 | 1 | Nil | Nil | 1 | Nil | Nil | Nil | | | | | | | | | | | | | | | | 3 | 0.3 |
| Total | | 1,606 | 1,783 | 2,119 | 2,374 | 3,000 | 3,259 | 2,765 | 2,738 | 3,240 | | | | | | | | | | | | | | | | 22,884 | 2288.4 |

資料IX-12 パキスタン国内の大学のコンピューター研究者とハードウェアについて

Table-1: COMPUTER SCIENCE FACULTY AT PAKISTANI UNIVERSITIES 1986

| | STAFF | | | |
|--|-------|-------------------|----------|-------------|
| | Total | Foreign Qualified | CS PhD's | Other PhD's |
| Karachi University | 3 | 2 | - | 1 |
| Punjab University | 3 | 1 | - | 1 |
| Quaid-i-Azam University | 5 | 3 | 1 | - |
| University of Engineering & Technology | 5 | 5 | 3 | - |

Table-2: AVAILABLE LABORATORY FACILITIES 1986

| | HARDWARE | | | SOFTWARE | |
|----------------------------------|---------------------------|--------|---------------------------------------|-------------------------------------|------------------------------------|
| | Logic Design/Architecture | Micros | Mainframe | Languages | Packages |
| Karachi University | None | 15 | Yes | FORTRAN, BASIC | SSP, SS |
| Punjab University | None | 18 | None *VAX 11/73 expected | COBOL, BASIC FORTRAN, Pascal | d Base, SS |
| Quaid-i-Azam University | | 6 | Obsolete IBM 360 *NEC 610 expected | COBOL, BASIC Pascal Assembler | d Base, SSP, LPS, SPSS, GPSS |
| University of Engg. & Technology | None | None | Obsolete IBM 360 | FORTRAN, RPG Assembler | SSP, SS LP-MOSS |

資料IX - 13 Aga-Khan大学社会医学実習の成果(1)

SUMMARY FINDINGS OF SURVEYS IN CHS FIELD SITES

| | <u>Drangi</u> | <u>Karimabad Colony</u> | <u>Chanasser Soth</u> | <u>Crax Village</u> | <u>Issa Naori</u> | <u>Azza Basti</u> |
|--|---------------|-------------------------|-----------------------|---------------------|-------------------|-------------------|
| Year Survey conducted | 1984-85 | 1984-85 | 1985-86 | 1985-86 | 1986-87 | 1987-88 |
| Total Number of Residents | 3870 | 3690 | 9620 | 6800 | 8580 | 9450 |
| No. of households interviewed | - | - | 1340 | 968 | 1280 | 1382 |
| Quick Count Survey | | | | | | |
| IN-depth Survey | 507 | 729 | 425 | 392 | 400 | 581 |
| SOCIO-ECONOMIC INDICATORS | | | | | | |
| Average number of persons per housing unit | 7.6 | 5.1 | 7.2 | 7.0 | 6.7 | 6.9 |
| Average number of rooms per housing unit | 2.0 | 2.9 | 1.9 | 2.2 | 1.7 | 2.1 |
| Average number of persons per room | 3.8 | 1.8 | 3.8 | 3.2 | 4.2 | 3.3 |
| % Population age 10 + literatu | 73.0 | 92.6 | 64.2 | 74.0 | 54.2 | 68.4 |
| Average family income par month (Rs.) | 1490 | 2400 | 1565 | 1670 | 1535 | 2310 |
| Average par capita income par month(Rs.) | 196 | 470 | 217 | 239 | 229 | 335 |
| % of housing units owned by occupants | 90.0 | 83.0 | 87.5 | 75.4 | 4.6 | 48.7 |
| % of housing units having private water connection | 23.5 | 100.0 | 47.2 | 9.9 | | |
| % of housing units having modern toilet(sokpit/flush) facilities | 88.0 | 100.0 | 81.2 | 34.5 | 84.2 | 85.4 |
| % of housing units having electricity | 60.4 | 100.0 | 87.3 | 74.0 | 74.4 | 89.7 |
| Major languages spoken (%): Urdu | 87.0 | 36.0 | 15.0 | 4.2 | 5.0 | 37.5 |
| Sindhi | 0.0 | 8.0 | 47.0 | 7.3 | 0.0 | 2.4 |
| Punjabhi | 6.0 | 0.0 | 16.0 | 34.1 | 95.0 | 42.5 |
| Balochi | 0.5 | 0.0 | 3.0 | 31.9 | 0.0 | 0.5 |
| Pushto | 2.0 | 0.0 | 2.0 | 10.5 | 0.0 | 7.7 |
| Bujrati/Kutchi | 0.0 | 49.1 | 5.0 | 8.8 | 0.0 | 0.1 |
| Others | 2.5 | 6.9 | 13.0 | 3.2 | 0.0 | 9.2 |
| Origin of Head (%): | | | | | | |
| Native (Karachi) | 0.0 | 0.0 | 57.0 | 50.3 | 16.3 | 12.6 |
| Sind | 5.0 | 28.0 | 15.0 | 9.2 | 1.7 | 4.0 |
| Punjab | 17.0 | 5.0 | 12.0 | 19.8 | 80.3 | 46.4 |
| NWFP | 3.0 | 2.0 | 6.0 | 5.3 | 1.1 | 16.4 |
| Baluchistan | 1.0 | 3.0 | 3.0 | 10.6 | 0.6 | 1.6 |
| India & other places | 63.0 | 54.0 | 6.0 | 4.8 | 0.0 | 18.9 |
| % Migrated during the last 10 years | 34.3 | 37.7 | 23.0 | 24.0 | 19.0 | 22.6 |

資料IX-14 Aga-Khau大学社会医学実習の成果(2)

SUMMARY FINDINGS OF SURVEYS IN CHS FIELD SITES

| | Drangi | Karismabad Colony | Chanaser Soth | Grax Village | Issa Naori | Azza Basti |
|---|--------|-------------------|---------------|--------------|------------|------------|
| DEMOGRAPHIC INDICATORS | | | | | | |
| Sex Ratio (males per 100 females) | 113 | 101 | 107 | 104 | 112 | 112 |
| % of population below 5 years | 18.4 | 8.4 | 20.4 | 21.4 | 20.3 | 19.8 |
| % of population below 15 years | 49.0 | 28.4 | 50.1 | 49.8 | 46.8 | 48.2 |
| % of population above 60 years | 4.6 | 6.8 | 5.0 | 5.2 | 4.2 | 3.5 |
| Crude birth rate (per 1000 population) | 40.8 | 16.3 | 40.5 | 44.0 | 44.4 | 41.0 |
| Crude death rate (per 1000 population) | 9.6 | 7.3 | 11.2 | 14.7 | 18.4 | 10.9 |
| Infant Mortality Rate (per 100 live births) | 110.4 | 33.3 | 95.0 | 145.0 | 143.6 | 105.0 |
| Infant deaths as percent of total deaths | 45.2 | 7.4 | 34.3 | 54.6 | 44.0 | 35.9 |
| Child(1-4 years) as percent of total deaths | 5.5 | 11.1 | 14.8 | 11.3 | 12.0 | 8.7 |
| % of currently married women never used FP method | - | 4.2 | 82.2 | 86.5 | 83.5 | 71.5 |
| % of co-women 15-49 currently using contraceptive | - | 55.7 | 7.4 | 6.2 | 11.7 | 14.7 |
| MORBIDITY AND HEALTH RELATED INDICATORS | | | | | | |
| % ill for over one week (of those reported ill) | 67.7 | 76.7 | 65.2 | 59.0 | | 63.7 |
| Major disease (among those reported ill) % | | | | | | |
| Malaria/Fever | 19.0 | 3.7 | 11.1 | 15.1 | | 21.4 |
| Respiratory infection | 24.2 | 25.3 | 27.0 | 24.0 | 10.4 | 41.5 |
| Diarrhoea/GIT | 17.6 | 7.7 | 9.7 | 13.2 | | 8.0 |
| Hypertension/CVD/Diabetes | 3.2 | 18.9 | 7.1 | 8.9 | | 11.6 |
| Health facility utilized (by those reported ill) % | | | | | | |
| Govt. Hospital/Dispensary | 9.7 | 7.3 | 12.9 | 9.0 | | 26.2 |
| Private Hospital/Clinic | 58.8 | 63.4 | 82.1 | 81.0 | | 64.9 |
| Hakim | 1.6 | 0.6 | 0.6 | 2.2 | | 2.4 |
| Homeopath | 0.4 | 2.9 | 1.5 | 2.1 | | 3.0 |
| Compounder/unqualified Doctors | 3.4 | 0.3 | 0.3 | 4.3 | | 2.1 |
| Faith Healer | 0.2 | 0.1 | 0.0 | 1.4 | | 0.2 |
| None | 22.7 | 17.6 | 2.6 | 0.0 | | 1.2 |
| Average expenses incurred on treatment per capita (on those reported ill) Rs. | 72.00 | 46.00 | 99.00 | 100.0 | | |
| Cause of death : | | | | | | |
| Diarrhoea/GIT and infections | 19.7 | 8.0 | 13.3 | 22.3 | | 21.4 |
| Diseases. | 30.6 | 3.7 | 13.3 | 5.6 | | 6.1 |
| Birth Related | 14.0 | 51.8 | 26.7 | 16.7 | | 9.2 |
| CVD/Stroke | 5.6 | 14.8 | 0.0 | 11.1 | | 3.1 |
| Cancer | | | | | | |

資料IX-15 口腔疾患における細菌の分離成績

A STUDY OF ORAL BACTERIOLOGICAL SPECIMENS

(NOVEMBER 1974—NOVEMBER 1979)

TABLE NO. 1

PERCENTAGE DISTRIBUTION OF 650 CASES

| DIRECT SMEARS RESULTS | TOTAL | SEX DISTRIBUTION | |
|--|--------|------------------|--------|
| | | Male | Female |
| Gram Positive Cocci | 44.61% | 23.84% | 20.77% |
| Gram Negative Cocci | 2.61% | 1.69% | 0.92% |
| Fusiformis Spirochaetes and Pus Cells | 30.30% | 13.84% | 16.46% |
| | 95.38% | | |

TABLE NO. 2

CULTURE REPORT

| | | | |
|-----------------------------------|--------|----------------------------------|-------|
| Staphylococcus pyogenes | 55.00% | Proteus vulgaris | 0.61% |
| Non Haemolytic Streptococcus | 17.69% | Beta Haemolytic Streptococcus | 3.07% |
| Haemolytic Streptococcus | 7.38% | Streptococcus pneumoniae | 0.30% |
| Alpha Haemolytic Streptococcus | 4.76% | Pseudomonas aeruginosa | 0.15% |
| Streptococcus viridans | 1.23% | Escherchia coli | 9.69% |
| Haemophilus influenza | 0.61% | Klebsiella pneumoniae | 0.46% |

Source ; Dr. M. A. Soofi, College of Community Medicine, Lohore

資料IX-16 College of Community Medicine の環境衛生学講座の調査研究の抜粋
 COMMUNITY ENVIRONMENTAL SANITATION SURVEY OF A KATACHI ABADI OF NAWAZ SHARIF COLONY FERAZ PUR ROAD, LAHORE.
 CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCES, COLLEGE OF COMMUNITY MEDICINE, LAHORE.

| Block No. | POPULATION | | | HOUSING | | | WATER SUPPLY | | | HUMAN EXCRETA DISPOSAL & DRAINAGE. | | | ROAD AND STREETS | | LIGHTING. | |
|-----------|------------|-------|-------|---------|------------|-------|--------------|------------|-------|------------------------------------|------------|-------|------------------|------------|-----------|--|
| | ADULT | CHILD | TOTAL | KUCHA | SEMI-PUCCA | PUCCA | WASA | OWN SYSTEM | FLUSH | PARTLY FLUSH | CARRI-AGE. | KUCHA | PUCCA | ELECT-RIC. | K. OIL | |
| A | 105 | 66 | 171 | - | 20 | 9 | 29 | - | 29 | - | - | - | 29 | 29 | - | |
| B | 106 | 77 | 183 | - | 30 | 5 | 35 | - | 35 | - | - | - | 35 | 35 | - | |
| C | 15 | 7 | 22 | - | 3 | 1 | 4 | - | 4 | - | - | - | 4 | 4 | - | |
| D | 84 | 65 | 149 | - | 20 | 7 | 27 | - | 27 | - | - | - | 27 | 27 | - | |
| E | 23 | 26 | 49 | - | 10 | - | 10 | - | 10 | - | - | - | 10 | 10 | - | |
| F | 14 | 12 | 26 | - | 3 | 1 | 4 | - | 4 | - | - | - | 4 | 4 | - | |
| TOTAL | 347 | 253 | 600 | - | 86 | 23 | 109 | - | 104 | - | - | - | 109 | 109 | - | |

Source ; Department of Environmental Health Sciences, College of Community Medicine, Lahore

収 集 資 料

1. Diarrhea in children due to enterotoxigenic E. Coli.
2. Pakistan pediatric journal, Volume XI, No.3, July-Sept. 1987
3. Rawalpindi medical college: SHIFA, 1987-88
4. Pakistan journal of Health: vol. 25, 1,2,1988 April
5. Annual report: National institute of malaria research and training, Jan. 1, 1987, Ministry of Health
6. Presentation on EPI Sind Province by Director Health Services Sind at Hyderabad, August 1988
7. EPI progress report 1987-88
Dr. A. Razak Bugti, Project director EPI Sind, Karachi
8. Commitments of EPI
9. 5ヵ年保健計画
10. Isolation, purification and characterization of heat-stable Enterotoxin of E. Coli from human resources
11. Breast cancer, A research contribution, Dr. K. A. Shakoor
12. Pakistan Medical Research Council, A profile 1986
13. Quaid-e-Azam University, Islamabad
14. Statistical pocket book of SIND 1988
15. Identification and characterization of enterotoxigenic E. Coli
16. Proceedings Shaikh Zayed postgraduate Medical Institute, Vol. 1, No. 1, 1987
17. Pakistan Journal of Medical Research, Vol. 27, No.1, Jan-Mar 1988
18. Situation Analysis of children and women in Pakistan, Jun. 1987

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