# JICA'S TECHNICAL COOPERATION IN THE ISLAMIC REPUBLIC OF PAKISTAN

1982



**Japan International Cooperation Agency** 



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## Introduction

The Japan International Cooperation Agency
JICA performs activities related to internation

In order to implement the work smoothly an organs, local autonomous bodies and private ent developing countries and international organiza

The following is an outline of the operati-

- (1) to extend technical cooperation to de-
- (2) to carry out the work necessary for t Volunteers;
- (3) to supply funds necessary for the imp development of agriculture, forestry,
- (4) to provide services necessary for smo world;
- (5) to recruit and provide training to qu
- (6) to provide new services for the imple

#### Outline of JICA's Technical Cooperation

#### 1. Training Program for Overseas Participants

This program provides overseas participants with technical training in various fields. There are two types of training designed at the request of developing countries; a group training program and an individual training program.

Participants study at JICA training centers, government research organizations, universities and/or training centers of private enterprises.

#### 2. Expert Assignment Program

JICA sends Japanese experts to developing countries or international organizations. The experts participate in planning, execution, evaluation and make recommendations for development programs in these government organizations, research institutes, or training centers.

#### 3. Equipment Supply Program

In order to make technical cooperation more effective, JICA supplies equipment necessary for the activities of JICA's ex-trainees, Japanese experts, and Japan Overseas Cooperation Volunteers.

The equipment includes machinery, machine tools, etc.

## 4. Project-Type Technical Cooperation Programs

"Project-type" technical cooperation programs combine the above-mentioned three forms of programs and are carried out systematically and comprehensively in the countries concerned.

Under these types of programs, JICA provides technical assistance by dispatching survey teams, assigning experts, supplying equipment, accepting counterparts related to projects, and performing follow-up evaluation after the completion of the projects.

These types of programs include the Overseas Technical Cooperation Center Program, the Health and Medical Cooperation Program, the Agriculture, Forestry and Fisheries Cooperation Program, as well as the Industrial Development Cooperation Program.

#### 4.1 Overseas Technical Cooperation Center Program

Overseas technical cooperation centers are designed to provide training for engineers and for skilled workers whose services are essential to the socio-economic progress of developing countries.

This program aims at development of manpower resources, development and improvement of production methods, and the development of vocational training.

#### 4.2 Health and Medical Cooperation Program

This program is designed to offer medical assistance to developing countries whose people suffer from epidemic or endemic diseases, and emphasizes cooperation in the bettering of the citizens through the improvement of public hygiene and environment.

#### 4.3 Agriculture, Forestry and Fisheries Development Cooperation Program

This program intends to improve living standards through production increases in the fields of agriculture, forestry and fisheries.

The forms of assistance are technical guidance in agricultural extension centers or model extension farms; comprehensive guidance in regional infrastructure of designated project areas; and assistance in enhancing the agricultural research and development capacity of recipient countries.

## 4.4 Industrial Development Cooperation Program

This program aims at effective utilization of locally available natural or human resources for the development of various mining and manufacturing industries which will expand employment opportunities.

## 5. Development Survey Program

The "Development survey program" is an advisory service which dispatches survey teams to development projects in the public sector.

# 6. Development Cooperation Program

JICA offers long-term and low-interest loans to Japanese corporations (including foreign corporations financed by Japanese firms) which require funds for improvement and expansion of facilities, or funds for experimental projects to promote development in various sectors.

## 7. Japan Overseas Cooperation Volunteers Program

This program is designed to promote and assist the cooperation extended by Japanese young people for the socio-economic progress of developing countries.

The sector covered by this program has a wide range and includes agriculture, forestory and fisheries, civil engineering and construction, health and hygiene, mining and manufacturing and even education, sports and other fields.

Upper figure: 1,000 Yen Lower figure: U.S.\$1,000

Table 1. Total Expenditures by Type

| Type  | Total 3)<br>F.Y.1954-F.Y.1977 | F.Y.1978          | F.Y.1979          | F.Y.1980          | F.Y.1981          | Cumulative Total        |
|---|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|
| Training Program  | 521,086                       | 75,807            | 107,907           | 168,668           | 167,098           | 1,040,566               |
| (Number of Participants)  | 1,662<br>(758)                | 360<br>(42)       | 492<br>(54)       | 744<br>(72)       | 758<br>(68)       | 4 <b>,</b> 016<br>(994) |
| Expert Assignment Programs <sup>1)</sup>                                    | 958,704<br>2,801              | 35,499<br>169     | 103,711           | 115,109           | 158,176           | 1,371,199               |
| (Number of Japanese Experts)  | (209)                         | (7)               | 473<br>(11)       | 508<br>(6)        | 717<br>(24)       | 4,668<br>(257)          |
| Survey Mission  | 748,988                       | 79,295            | 385,637           | 514,032           | 293,179           | 2,021,131               |
| (Number of Mission members)   | 2,412 (284)                   | 377<br>(28)       | 1,760<br>(40)     | 2,267<br>(58)     | 1,330<br>(114)    | 8,146<br>(524)          |
| Equipment supply <sup>2)</sup>  | 426,953<br>1,295              | 21,499<br>102     | 119,035<br>543    | 90,828<br>400     | 135,945<br>617    | 794,260<br>2,957        |
| Japan Overseas Cooperation<br>Volunteers<br>(Number of Japanese Volunteers) | , -<br>, -<br>(-)             | , -<br>, -<br>(-) | , -<br>, -<br>(-) | , -<br>, -<br>(-) | , -<br>, -<br>(-) | , -<br>, -<br>(-)       |
| Others  | 13,873<br>48                  | 4,577<br>22       | 7,720<br>35       | 10,403<br>46      | 19,023<br>86      | 55,596<br>237           |
| Grand Total   | 2,669,604<br>8,218            | 216,677<br>1,030  | 724,010<br>3,303  | 899,040<br>3,965  | 773,421<br>3,508  | 5,282,752<br>20,024     |

Note: The following exchange rates were used: 1954-1971 \(\frac{2}{3}\)300.00/US\(\frac{1}{3}\)1972 \(\frac{2}{3}\)308.00/US\(\frac{1}{3}\)1973 \(\frac{2}{2}\)272.84/US\(\frac{1}{3}\)1974 \(\frac{2}{2}\)291.49/US\(\frac{1}{3}\)1975 \(\frac{2}{2}\)297.04/US\(\frac{1}{3}\)1976 \(\frac{2}{2}\)296.50/US\(\frac{1}{3}\)1977 \(\frac{2}{3}\)268.51/US\(\frac{1}{3}\)1978 \(\frac{2}{3}\)20.53/US\(\frac{1}{3}\)1979 \(\frac{2}{3}\)219.17/US\(\frac{1}{3}\)1981 \(\frac{2}{3}\)20.53/US\(\frac{1}{3}\)1981 \(\frac{1}{3}\)20.53/US\(\frac{1}{3}\)1981

- 1) Includes expenditures of Project-type technical cooperation programs
- 2) Including expenditures of Project-type technical cooperation programs
- 3) F.Y. indicates the Fiscal Year of Japan which starts on April 1 every year.

Table 2. Total Expenditures by Program

Upper figure: 1,000 Yen Lower figure: U.S.\$1,000

|     | Program   | Total<br>F.Y.1954-F.Y.1977 | F.Y.1978         | F.Y.1979         | F.Y.1980         | F.Y.1981         | Cumulative Total    |
|-----|---|----------------------------|------------------|------------------|------------------|------------------|---------------------|
| 1.  | Training Program  | 521,086<br>1,662           | 75,807<br>360    | 107,907<br>492   | 168,668<br>744   | 167,098<br>758   | 1,040,566<br>4,016  |
| 2.  | Expert Assignment Program                                     | 857,645<br>2,542           | 32,569<br>155    | 56,064<br>256    | 22,077<br>98     | 43,361<br>197    | 1,011,716<br>3,248  |
| 3.  | Equipment Supply Program                                      | 117,900<br>377             | 19,456<br>93     | 37,131 .<br>170  | 73,697<br>325    | _<br>_           | 248,184<br>965      |
| 4.  | Overseas Technical<br>Cooperation Center Program              | 407,065<br>1,170           | 8,757<br>42      | 99,550<br>454    | 109,286<br>482   | 245,866<br>1,115 | 870,524<br>3,263    |
| 5.  | Health and Medical<br>Cooperation Program                     | 2,468<br>8                 | 205<br>0         | 30,594<br>140    | 956<br>4         | 843<br>4         | 35,066<br>156       |
| 6.  | Agriculture, Forestry and<br>Fisheries Cooperation<br>Program | 9,644<br>28                |                  | -<br>-           | -<br>-           | _<br>_           | 9,644<br>28         |
| 7.  | Industrial Development<br>Cooperation Program                 | <u>-</u>                   | 1,793<br>9       | <u> </u>         | 977<br>4         | 8,641<br>39      | 11,411<br>52        |
| 8.  | Development Survey Program                                    | 729,371<br>2,353           | 73,236<br>348    | 383,427<br>1,749 | 511,867<br>2,257 | 279,167<br>1,266 | 1,977,068<br>7,973  |
| 9.  | Development Cooperation                                       |                            | <u> </u>         | <u> </u>         | _<br>_           | _<br>_           | -                   |
| 10. | Japan Overseas Cooperation<br>Volunteers                      |                            | _<br>_           | -<br>-           | <u>-</u><br>-    | _<br>_           | -                   |
| 11. | Others  | 24,425<br>78               | 4,854<br>23      | 9,337<br>42      | 11,512<br>51     | 28,445<br>129    | 78,573<br>323       |
|     | Grand Total   | 2,669,604<br>8,218         | 216,677<br>1,030 | 724,010<br>3,303 | 899,040<br>3,965 | 773,421<br>3,508 | 5,282,752<br>20,024 |

Note: Refer to Table 1 for exchange rates.

Table 3. Training Program for Overseas Participants (Number of Pakistani Participants)1)

Number of persons

|     | Sector                              | Total<br>F.Y.1954-F.Y.1977 | F.Y.1978 | F.Y.1979 | F.Y.1980 | F.Y.1981                       | Cumulative Total |
|-----|-------------------------------------|----------------------------|----------|----------|----------|--------------------------------|------------------|
| 1.  | Planning and Administration         | 104                        | 11       | 14       | 16       | 13                             | 158              |
| 2.  | Public Works and Utilities          | 209                        | 11       | 20       | 18       | 16 <sup>(1a)</sup> )           | 274              |
| 3.  | Agriculture, Forestry and Fisheries | 121                        | 6        | 6        | 8        | 14 <sup>(1<sup>a)</sup>)</sup> | 155              |
| 4.  | Mining and Industry                 | 182                        | 5        | 6        | 12       | 13                             | 218              |
| 5.  | Energy                              | 20                         | _        | _        | 7        | 2                              | 29               |
| 6.  | Commerce and Tourism                | 35                         | 5        | 2        | 4        | 3                              | 49               |
| 7.  | Human Resources                     | 31                         | _        | 1        | 3        | 1                              | 36               |
| 8.  | Public Health and Medicine          | 37                         | 4        | 5        | 4        | 6                              | 56               |
| 9.  | Social Welfare                      | _                          | _        |          |          | -                              | -                |
| 10. | Others                              | 19                         | _        | _        | -        | -                              | 19 .             |
|     | Grand Total                         | 758                        | 42       | 54       | 72       | 68                             | 994              |

Note: 1) Includes number of participants of third country training programs.

Table 4. Expert Assignment Program (Number of Japanese Experts) 1)

|     | Sector                              |     | otal<br>5-F.Y.1977 | F.Y.1978 | F.Y.1979 | F.Y.1980 | F.Y.1981 | Cumulative Total |
|-----|-------------------------------------|-----|--------------------|----------|----------|----------|----------|------------------|
| 1.  | Planning and Administration         | _   | (-)2)              | 1 (-)    | - (-)    | - (-)    | 1 (-)    | 2 (-)            |
| 2.  | Public Works and Utilities          | 92  | (80)               | 5 (1)    | 9 (1)    | 3 (-)    | 10 (3)   | 119 (85)         |
| 3.  | Agriculture, Forestry and Fisheries | 74  | (74)               | - (-)    | - (-)    | - (-)    | - (-)    | 74 (74)          |
| 4.  | Mining and Industry                 | 23  | (23)               | 1 (1)    | 1 (1)    | 2 (2)    | 8 (4)    | 35 (31)          |
| 5.  | Energy                              | 1   | (1)                | - (-)    | - (-)    | - (-)    | - (-)    | 1 (1)            |
| 6.  | Commerce and Tourism                | 1   | (1)                | - (-)    | - (-)    | - (-)    | - (-)    | 1 (1)            |
| 7.  | Human Resources                     | 5   | (3)                | - (-)    | - (-)    | - (-)    | 4 (-)    | 9 (3)            |
| 8.  | Public Health and Medicine          | 1   | (-)                | - (-)    | 1 (-)    | 1 (-)    | 1 (-)    | 4 (-)            |
| 9.  | Social Welfare                      | _   | (-)                | - (-)    | - (-)    | - (-)    | - (-)    | - (-)            |
| 10. | Others                              | 12  | (12)               | - (-)    | - (-)    | - (-)    | - (-)    | 12 (12)          |
|     | Grand Total                         | 209 | (194)              | 7 (2)    | 11 (2)   | 6 (2)    | 24 (7)   | 257(207)         |

Note: 1) Includes number of experts of Project-type technical cooperation programs.

2) The Figures in parenthesis indicate the number of experts assigned under the Independent Expert Dispatch Program.

Table 5. Equipment Supply Program (Expenditures)

|    | Equipment                                   | F.Y.1978 | F.Y.1979 | F.Y.1980 | F.Y.1981 | Total   |
|----|---|----------|----------|----------|----------|---------|
| 1. | Equipment for Telecommunication<br>Training | 19,456   | -        | -        | _        | 19,456  |
| 2. | Equipment for Telecommunication             | _        | 11,770   | _        | _        | 11,770  |
| 3. | Equipment for Leather Processing            | -        | 25,361   | 28,587   | _        | 53,948  |
| 4. | Equipment for Ceramics                      | -        | _        | 43,920   | -        | 43,920  |
| 5. | Equipment Survey                            | -        | _        | 1,190    | -        | 1,190   |
|    |   |          |          |          |          |         |
|    |   |          | ·        |          |          |         |
|    |   |          |          |          |          |         |
|    |   |          |          |          |          |         |
|    | Total                                       | 19,456   | 37,131   | 73,697   | -        | 130,284 |

# Table 6. Project-Type Technical Cooperation Programs (Expenditures)

Table 6.1 Overseas Technical Cooperation Center Program

|    | Project  | Cooperation Period | Equipment Supply (1,000 yen) | Number of<br>Japanese Experts | Number of<br>Counterparts |
|----|--|--------------------|------------------------------|-------------------------------|---------------------------|
| 1. | Telecommunication Research<br>Center               | Nov.1963-Jun.1969  | 171,237                      | 12                            | 14                        |
| 2. | Central Telecommunication<br>Research Laboratories | Mar.1979-Mar.1984  | 184,074                      | 32                            | 8                         |
|    |  |                    |                              |                               |                           |
|    |  |                    |                              |                               |                           |
|    |  |                    |                              |                               |                           |
|    |  |                    |                              |                               |                           |
|    |  |                    |                              |                               |                           |
|    | Total  |                    | 355,311                      | 44                            | 22                        |

Table 6.2 Industrial Development Cooperation Program

| Project   | Cooperation Period | Equipment Supply (1,000 Yen) | Number of<br>Japanese Experts | Number of<br>Counterparts |
|---|--------------------|------------------------------|-------------------------------|---------------------------|
| 1. Modernization of Machining Technology at Pakistan Industrial Technical Assistance Center | Sep.1982-Sep.1985  | -                            | 4                             |                           |
|   |                    |                              |                               |                           |
| Total   |                    | -                            | 4                             | -                         |

Table 7. Development Survey Program (Expenditures)

|     | Project  | Total<br>F.Y.1975-F.Y.1977 | F.Y.1978 | F.Y.1979 | F.Y.1980 | F.Y.1981 | Cumulative Total |
|-----|--|----------------------------|----------|----------|----------|----------|------------------|
| 1.  | Qasim Port Construction<br>Project   | 223,179                    | _        | <b>-</b> | -        | -        | 223,179          |
| 2.  | Electrification of Karachi<br>Suburban Railway                             | 5,954                      | _        | -        | _        | -        | 5,954            |
| 3.  | Central Telecommunication<br>Research Laboratories<br>Construction Project | 115,056                    | -        | -        | _        | -        | 115,056          |
| 4.  | Shipping and Shipbuilding<br>Development Programme                         | 7,722                      | 18,824   | 24,880   | _        |          | 51,426           |
| 5.  | Guadar Mini Port Develop-<br>ment Project                                  | -                          | 47,662   | 134,259  | 107      | -        | 182,028          |
| 6.  | Transportation and<br>Support Facilities Project                           | -                          | _        | 3,200    | 352      | -        | 3,552            |
| 7.  | Coastal Fishing Develop-<br>ment Project                                   | -                          | _        | 4,527    | 344      | _        | 4,871            |
| 8.  | Introduction of Containeriza-<br>tion Project                              | -                          | -        | -        | 72,650   | 69,404   | 142,054          |
| 9.  | Road Construction Project  | _                          | -        | _        | 1,738    | _        | 1,738            |
| 10. | Economic and Technical<br>Cooperation Survey                               | -                          | -        | -        | 2,967    | 3,605    | 6,572            |

(Continued)

|     | Project   | Total<br>F.Y.1975-F.Y.1977 | F.Y.1978 | F.Y.1979 | F.Y.1980 | F.Y.1981 | Cumulative Total |
|-----|---|----------------------------|----------|----------|----------|----------|------------------|
| 11. | Water Supply Project for<br>Afghan Refugees                     | -                          | _        | _        | 180,949  | 30,858   | 211,807          |
| 12. | Improvement Project of<br>Medical Equipment                     | -                          | _        | -        | 6,700    | _        | 6,700            |
| 13. | National Transport<br>Plan in Pakistan                          | -                          |          | -        | <b>-</b> | 124,019  | 124,019          |
| 14. | Pakistan Railway<br>Locomotives Supply Project                  | -                          | -        | _        | -        | 12,875   | 12,875           |
| 15. | Agricultural Development<br>on Widing of Pat Feeder<br>Canal    | -                          |          | -        | _        | 33,034   | 33,034           |
| 16. | Road Construction Project<br>in Baluchistan                     | -                          | -        | -        | -        | 2,599    | 2,599            |
| 17. | Population Welfare<br>Program                                   | -                          | _        | -        | -        | 604      | 604              |
| 18. | Establishment of<br>Hospital in Medical<br>Complex in Islamabad | -                          | _        | -        | _        | 2,169    | 2,169            |
| 19. | Project Finding-Mining,<br>Industry and Power<br>Project        | 981                        | 62       | <b>-</b> | -        | -        | 1,043            |

# (Continued)

| Project   | Total<br>F.Y.1975-F.Y.1977 | F.Y.1978 | F.Y.1979 | F.Y.1980 | F.Y.1981 | Cumulative Total |
|---|----------------------------|----------|----------|----------|----------|------------------|
| 20. Lakhra Coal Mining and<br>Power Station Project | -                          | 6,688    | 196,893  | 219,442  | _        | 423,023          |
| 21. Rehabilitation Plan of<br>Special Steel Mill    | -                          | -        | 19,668   | 26,618   | -        | 46,286           |
|   |                            |          | 1<br>1   |          |          |                  |
|   |                            |          | ·        |          |          |                  |
|   |                            |          |          |          |          |                  |
|   |                            |          |          |          |          |                  |
|   |                            |          |          |          |          |                  |
|   |                            |          |          |          |          |                  |
| Total   | 352,892                    | 73,236   | 383,427  | 511,867  | 279,167  | 1,600,589        |