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COUNTRY AND INTERCOUNTRY PROGRAMMES AND PROJECTS

Consideration and approval of country programmes

THIRD COUNTRY PROGRAMME FOR
Pakistan

UNDP assistance requested by the Government of Pakistan
for the period 1982-1986

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Annex: Financial summary*

*Will be issued as an addendum to this document.

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1/ The previous country programmes for Pakistan were issued under the document symbols DP/GC/PAK/R.1-DP/GC/PAK/R.2.

INTRODUCTION

1. The formulation of the third country programme for UNDP assistance to Pakistan began in January 1981 with a view to presentation of the programme document to the Governing Council of UNDP at its June 1982 session. This timing was set both to reorient UNDP collaboration at the beginning of the third programming cycle (1982-1986), and to tie UNDP co-operation in as closely as possible with the Government's new Three Year Public Sector Development Programme 1982-1984, which became effective 1 July 1981.

2. Use was made of a number of key sectoral studies, and valuable suggestions were received from a number of United Nations agency headquarters which had been requested to comment on the draft country programme. The tripartite nature of the formulation process was adhered to from an early stage.

3. It is anticipated that roughly 93 percent of the Indicative Planning Figure (IPF) of US\$52.14 million for the second country programme will be expended by the end of 1981. The illustrative IPF for 1982-1986 was approved at \$118 million but has been reduced at present by 20 percent for programming, pending clarification of the actual resource availability during the period. Effectively, therefore, US\$94.4 million is available from the 1982-1986 IPF, together with anticipated carry over of US\$3.75 million from the second country programme, making a total of US\$98.15 million. The 1982-1986 budgets of already approved projects which will continue into the third cycle total US\$36.15 million and US\$53.0 million has been earmarked for specific sectors and objectives for which projects are to be worked out at a later stage, leaving a balance of US\$9.0 million as reserve (see Annex.)

NATIONAL DEVELOPMENT OBJECTIVES AND PROGRAMMES TO BE SUPPORTED BY UNDP

4. The Fifth Five Year Plan, (1979-1983), laid down a sectoral strategy for public sector development expenditure which provided for a shift of emphasis to agriculture and infrastructure programmes. Adequate funds were earmarked for speedy execution of ongoing industrial projects in the steel, cement and fertilizer subsectors, but public sector industrial investments were more or less limited to these projects. Similarly, it was envisaged that allocations for Tarbela Dam repairs would cease to be needed after a few years. Finally, it was hoped that the annual average fertilizer subsidy could be contained to the 1978-1979 level of about 1 billion Pakistan rupees (PRs) (US\$101 million). Once the financial claims relating to these three categories were reduced, the funds released would be allocated to the new priority areas. Furthermore, these shifts were to take place within a real rate of increase of about 10 per cent per annum in aggregate public investment. Thus, agriculture, social and physical infrastructure were to receive a major boost, especially from the third year of the Plan onwards.

5. Whereas actual performance has been close to or better than Plan targets in some areas, significant shortfalls have characterised the implementation of the public sector development programmes during the first three years. Firstly, as a consequence of a marked deficiency of real net aid flows in relation to the planned levels, real public investment declined in the first three years rather than rising as planned at a rate of 10 per cent. Secondly, the Tarbela repairs turned out to be more extensive and prolonged. Thirdly, the fertilizer subsidy rose sharply due to an escalation in world prices coupled with an unanticipated surge in domestic

demand. Fourthly, technical and implementation problems delayed completion and raised costs of ongoing industrial projects. Consequently, the transition to the new strategy was delayed. Meanwhile, the second wave of oil price increases intensified the need for accelerated development of indigenous energy sources.

6. The deviation from the Plan strategy and the heightening of the energy problem necessitated a midplan review for reassessing needs and resetting the phasing of development programmes. At the same time, a three year Extended Fund Facility negotiated with the International Monetary Fund (IMF) and the likelihood of a companion structural adjustment loan from the World Bank, presented the occasion and opened the option for a planned medium-term effort at consolidating and redirecting public sector investments in the directions indicated by policy aims.

7. Accordingly, the Government has prepared a Three Year Public Sector Development Programme (TYPSDP) for fiscal years 1981-1982, 1982-1983 and 1983-1984. The size of the programme - Rs96 billion (US\$9.7 billion) for the whole period - implies an annual growth rate of 9.5 per cent roughly in line with the expected rate of cost increases. The planned development outlays provide for no increase in total real investment but still permit a strong structural shift of investments to priority areas because of the room made by the reduction in the allocation for fertilizer subsidies and for industries. The combined share of these two sectors will fall from nearly 25 per cent in the benchmark year (1980) to about 7 per cent in the terminal year (1984). The allocations to other sectors, in the aggregate, are planned to increase by 17.5 per cent a year or approximately 7 per cent in real terms.

8. During the course of this medium-term investment programme, the following sectoral changes of emphasis are planned:

	(Percentages)		
	<u>Share in total</u> <u>1980-1981</u>	<u>1983-1984</u>	<u>Increase from</u> <u>1980-1981 to 1983-1984</u>
Fertilizer subsidy	9.2	2.9	-59.3
Agriculture, water, rural development	19.1	24.2	64.9
Industry	15.3	4.1	-65.0
Energy	20.7	27.8	74.2
Transport and communications	18.3	20.4	45.1
Physical planning and housing	6.9	7.9	49.4
Education, manpower, health, population and social welfare	9.2	11.1	56.5
Others	<u>1.3</u>	<u>1.6</u>	<u>61.2</u>
TOTAL	<u>100.0</u>	<u>100.0</u>	<u>31.0</u>

9. Another main feature of the TYPSDP is that it calls for extensive decentralisation. In the very first year, provincial allocations are raised by 18 per cent, or twice the rate of increase for the federal programme. The provincial government will implement the programmes for delivery of the basic social services and local institutions will be given increasing responsibility for planning and executing such schemes in their areas.

10. The third UNDP country programme stems from the development priorities established in TYPSDP. Formulation of the country programme included sectoral discussions between representatives from the development ministries and the Planning and Economic Affairs Division, on the one side, and the representatives of UNDP and the United Nations specialised agencies in the country, on the other.

11. The content of the third country programme flows largely from that of the second country programme, and some of the successful and experimental activities in the earlier period are built on and continued with expanded objectives in the third programming cycle. Thus the programmes in livestock and poultry development, fruit crop improvement, cotton research, water resources development, skills development and civil aviation training will remain as important features in the third country programme. The Government now wishes to work for a finer focus in the third country programme so that its impact can be enhanced and greater concentration achieved on high priority areas. Accordingly, the number of individual projects will be reduced from the 1981 level of 76.

12. Another significant feature of the new programme will be an increase in the already marked investment orientation of UNDP inputs. The programme, for example, will include a US\$8 million contribution to assist the Government with the preparation of engineering feasibility studies for the Kalabagh Dam. Furthermore, project preparation in the water, agriculture and energy sectors will be undertaken within the framework of an umbrella pre-investment project to facilitate the investment activities of the World Bank, the Asian Development Bank (ASDB) and the International Fund for Agricultural Development (IFAD). Operational contacts with these development banks have been strengthened in recent years and there are already eight ongoing technical assistance projects which are directly associated with World Bank-International Development Association (IDA) credits.

13. Roughly four fifths of the resources have been earmarked for the three sectors. In line with the high priority accorded to the agricultural sector, nearly one third of the programmed resources in the third cycle will be devoted to agriculture, forestry and fisheries projects.

14. Approximately the same percentage of the programmed resources has been earmarked for the development of natural resources, mainly water, energy and mineral deposits.

15. Pakistan, with 33 million acres under irrigation in the Indus Basin, has the largest contiguous irrigated area in the world, but water logging, salinity and water management problems are combining to limit its still enormous potential. Long standing UNDP co-operation in this subsector will be extended substantially in the third cycle.

16. On the subsector of energy, in addition to an updating of the 1975 energy resources survey, a new project is being undertaken to demonstrate in village conditions the possibilities of photovoltaic, wind and biogas energy sources. Requests for technical assistance in energy planning and conservation are under preparation.

17. Assistance for further exploration of the Chagai copper deposits and the coal deposits at Dandot is planned as well as a feasibility study for the development of potash brine deposits for the fertilizer industry.

18. Roughly 17 per cent of the programmed resources has been earmarked for human resources development. With labour migration to the Middle East absorbing possibly 5 per cent of the estimated labour force, an expansion of vocational training programmes has become imperative. In continuation of the UNDP-supported skills development programme, technical assistance is being provided to the national vocational training programme in association with an IDA credit for US\$25 million. Assistance will also be provided to extend technical education programmes in the primary and secondary schools. The other areas in which UNDP co-operation will be requested are: manpower planning, development of a comprehensive social security system, and improving the relevance of curricula in secondary and higher education to employment needs.

19. In response to the Government's special development plan for Baluchistan, the third country programme provides for an expansion of ongoing projects in that province in the fields of fisheries development, deciduous fruit development and water management. A request for technical assistance in conjunction with a proposed IDA credit for minor irrigation and the agricultural development of selected parts of the province is under consideration.

20. Co-operation with other developing countries has long been a feature of Pakistan's development programmes, and these have been institutionalized with many countries through membership in the Colombo Plan and association with the Regional Co-operation for Development (RCD) group of countries. The Government supports initiatives in technical co-operation among developing countries (TCDC) and intends to use the country programme to expand this activity.

21. Much greater use will be made of national expertise during the third cycle and the hiring of national subcontractors and local professionals will be an important feature in the drive for greater self-reliance.

22. A characteristic of the second country programme has been the great success of the TOKTEN project, Transfer of Know-how through Expatriate Nationals (PAK/78/026), in attracting expatriate Pakistan professionals back to the country for short-term consultancies. Forty-seven eminent Pakistani expatriates have indicated their agreement to participate in the programme and will have completed assignments by the end of the second country programme period. Apart from the skills imparted during these short consultancies, the linkages with overseas institutions have been found to be productive.

23. The third country programme will also include projects which are directly related to the global objectives of the United Nations. These will be developed in particular to achieve the greater participation of women in development and improved facilities for disabled persons and to provide substantial inputs to International Drinking Water Supply and Sanitation Decade (IDWSSD) programmes.

24. Activities of the country programme will be closely integrated with the relevant programmes of bilateral donors; co-financing and other forms of collaboration are foreseen in a number of projects.

A. Agriculture

25. In terms of both social impact and economic importance, agriculture remains the most important sector of the economy, contributing one third of the country's gross domestic product (GDP) and providing the livelihood of over one half of its population. The Fifth Five Year Plan conceived the agricultural programme as a part of a comprehensive rural development thrust. It sought to increase the use of modern inputs to achieve substantial increases in yields, combined with institutional and infrastructural development to sustain growth. Direct investment in agriculture was to be substantially increased, and the Plan targeted a growth rate in the sector of 6 per cent per annum.

26. In early 1980, a new national agriculture policy was formulated in order to enhance the growth rate, which had not kept pace with expectations. Its main objectives were:

(a) To increase agricultural production, not only to attain national self-sufficiency but also to permit substantial exports;

(b) To provide opportunities to the people to engage in gainful employment to enhance their income for their social progress, and to contribute to national prosperity;

(c) To give the people equitable access to the natural resources of agricultural production, i.e. land and water;

(d) To provide rural areas with amenities such as potable water, sanitation, primary education, basic health care and village-to-market roads; and,

(e) To ensure preservation of the natural environment side by side with agricultural production, through rational measures in such matters as pest control, forest exploitation, control of grazing, wild life management, salinity and flood control, etc.

27. Within this broad policy framework there was a fundamental shift of emphasis from the payment of high input subsidies to other incentives and programmes to enhance productivity. In the specific case of fertilizer subsidies, which were absorbing most of the resources available to the agricultural sector, every endeavour is now to be made to phase them out completely by 1984-1985.

28. The Government will seek to marry this key objective of eliminating subsidies with that of securing continuing growth in the use of fertilizer at an annual rate of about 10 per cent. This will require appropriate upward adjustment of the procurement prices for major crops as well as a vigorous pursuit of other programmes addressed to raising farm productivity and incomes. The subsidy will also diminish as a result of the substitution of fertilizer imports by lower cost domestic production from new fertilizer plants.

29. Other areas to receive priority attention in the Fifth Five Year Plan period are applied research activities, improvement in extension services, livestock development, foodgrain storage, development of quality seed production and sound marketing arrangements, increase oil-seed production, salinity rehabilitation and drainage, improvements in water courses and on-farm water management, and greater availability of credit. There will also be increasing emphasis on minimizing energy requirements through the optimum use of fertilizer in interaction with minimum tillage techniques and on an expanded pest scouting system to reduce the use of pesticides. In support of these objectives UNDP assistance may be requested as outlined below:

(a) Agriculture planning and programming

30. The Fifth Five Year Plan anticipated the need to create special cells at the provincial and federal levels in order to strengthen institutional capabilities in project identification, formulation and evaluation. Also recognized as a critical need was an improved and strengthened statistical data base for agricultural planning. The new policy of 1980 further emphasized the importance of monitoring and evaluating project performance as well as of conducting special studies on pricing policies, economics, production and farm management.

UNDP co-operation

31. UNDP is already assisting the Agricultural Planning and Monitoring Cell of the Sind Government and the Agriculture Planning Cell of the North West Frontier Province. Assistance will be requested by the federal ministry of Agriculture for its Agricultural Planning Cell in the field of policy planning and for strengthening the statistical base of agricultural planning. Preparatory assistance for the latter was provided during the second country programme.

(b) Crop production (including research, agricultural inputs and water, farm management and extension)

32. The importance of strengthening and expanding fundamental and adaptive agriculture research has been widely recognized and has resulted in an increase in the funds made available by the government and by donors. The Pakistan Agricultural Research Council (PARC) is responsible for developing research policy and expanding all agricultural research at the national level. It also co-ordinates the exchange of information and research undertaken by universities and provincial institutions.

33. Steady progress has been made towards national self-sufficiency in food and imports of wheat have been greatly reduced in recent years. Yields could still be doubled and, in some cases, even trebled. Wheat yields, which have grown consistently during the past decade, are still among the lowest in the world. Edible oil imports continue to be high.

34. The most important single agricultural input in Pakistan is water. To provide substantial growth on a long-term basis, efficient management of available water resources is being undertaken by the Water and Power Development Authority (WAPDA). WAPDA has prepared a revised action plan for irrigated agriculture with the assistance of UNDP, identifying priorities and making policy recommendations,

the majority of which are already being implemented. The action plan calls for substantial investment in salinity and water logging control; priority is being given to those control projects which can bring about a major expansion of agricultural production. Efforts are being made to popularize existing varieties and develop new varieties of saline tolerant crops, grasses and trees to ensure that farmers continue to obtain economical returns from saline and water logged areas, while simultaneous programmes are being implemented to install drainage systems as a permanent solution. Total on-farm water losses are as high as 45 per cent and the new agricultural policy calls for an aggressive approach to improvement of water courses and precision land levelling.

35. It is estimated that, of the 11.5 million tons of wheat and 3.5 million tons of rice produced annually in Pakistan, over 15 per cent is lost to rodents or insects or is destroyed due to poor storage. Research and training in improved harvesting and storage methods are already underway and this work has a significant bearing on the whole food security system in Pakistan.

UNDP co-operation

36. In the field of research, UNDP may be requested for assistance in three key areas where high potential for development exists: (a) in the development of oil-seeds to help reduce the country's import bill of US\$274 million for edible oil; (b) development of livestock feeds from animal waste and crop residues; and, (c) continuation of assistance to the large cotton sector which is Pakistan's second ranking foreign exchange earner, the basis for the textile industry, and the main source of oil-seed production. UNDP has been assisting in cotton research in Multan since 1975, and will be requested to continue that assistance as well as support facilities elsewhere in the country. Other areas for which assistance may be sought include research on the prevention of food losses, crop yield constraints, farm management, soil fertility and fertilizer use, soil survey and management techniques, and development of appropriate agricultural machinery. Further assistance on wheat research through the International Centre for Maize and Wheat Improvement (CIMMYT) may also be requested.

37. In both previous country programmes UNDP has assisted in training scientists in crop research and production. Some other donors have been involved in this area and the growing strength of national expertise reflects the success of the training efforts. Increased assistance for post-harvest losses and storage programmes may be requested from UNDP, together with support for the development of agro-meteorology services.

38. The deciduous fruit production project (PAK/73/025) in Baluchistan has successfully generated an increase in all types of fruit crops and continued assistance from UNDP will be requested in Baluchistan.

39. UNDP will be requested for support in the three major input areas of the farming system: fertilizer use, tillage and pest scouting, including integrated pest control and reduction of the use of oil-based pesticides through improved scouting service. The Food and Agriculture Organization of The United Nations (FAO) has previously been assisting Pakistan in the fertilizer field through multi-bilateral programmes with the Government of the Netherlands and Norway and UNDP recently funded a five-year programme of assistance in vertebrate pest control (PAK/71/554) which may be extended in the third cycle.

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40. A project for the improvement of the agriculture extension services in the Punjab (PAK/78/044) has been assisted by UNDP for several years in association with an IDA credit for US\$12.5 million; similar assistance will be provided in Sind.

41. In the field of on-farm water management, UNDP has provided substantial assistance in the past to WAPDA in the formulation of the revised action programme for irrigated agriculture under the project (PAK/74/044). Implementation of some of the recommendations will require further support from UNDP. These requirements are discussed in the section on water resources (paragraph 66).

42. Support to minor irrigation and valley agricultural development schemes may be requested for Baluchistan as part of a World Bank investment programme resulting from a UNDP financed ground water exploitation project (PAK/73/032). (See paragraph 67.)

43. Finally, in this subsector close working relations will be maintained with UNDP intercountry projects dealing with the development of food legumes and coarse grains, the regional pesticide development network, and the Regional Network of Agricultural Machinery.

c) Agricultural Marketing

44. Well established arrangements exist for marketing agricultural products for export but are less developed for marketing within Pakistan. The number of regulated markets is to be enlarged in addition to the creation of organized wholesale markets, warehouses, and cold storage facilities. It is intended that the trade itself will be handled by the private sector, with planning and guidance provided by the public sector.

45. It is clear that the small farmer is in a disadvantaged position, particularly in the production of meat and milk, where the lack of clear marketing channels is a disincentive to production. In the Punjab 80 per cent of all livestock produce is consumed on the farm, yet for Pakistan as a whole, 7 per cent of dairy products are imported, with powdered milk a particularly large and costly import easily replaceable by local production. In the field of deciduous fruit, the very rapid expansion of orchards at present suggests serious marketing problems in the future. Difficulties are also growing in the fisheries subsector, where the traditional market for dried fish has an uncertain future.

UNDP co-operation

46. UNDP provided preliminary assistance in the field of marketing in the second country programme period, and the Government has decided to give a high priority to further UNDP assistance. A request maybe made to explore how small farmers can be more closely involved in marketing and to develop appropriate forms of association to strengthen this involvement.

(d) Livestock production

47. According to 1979-1980 estimates, Pakistan has 11.53 million buffalos, 15.03 million cattle, 30.20 million goats, 26.24 million sheep and 58 million poultry. In contributing 10 per cent of the national GDP, this sector provides some nine

million tons of milk and milk products, one million tons of meat per annum and about 85 per cent of the traction required for cultivation. Livestock are owned in small herds by some five million farm households and around one million landless families.

48. There is a tremendous potential for further development of livestock products. Urban demand for meat and milk at current price levels exceeds supply and the national herd is contributing well below its potential. Expansion of the milk collection services would provide added farm income, stimulate production and provide more milk for urban consumption. With breed improvement programmes, herd increases, technical servicing and assured availability of inputs, the production of milk could increase by as much as 50 per cent.

49. Livestock is normally fed only at maintenance levels and increases in feed could allow a production increment of 30 per cent for most species. Under the new agriculture policy, programmes for rearing 1.5 million male buffalos and fattening 1.4 million bullocks and bulls are to be undertaken to produce an additional 0.5 million tons of beef per annum for export. The quality of animals will be improved through selective breeding programmes and semen banks will be further developed. Greater emphasis needs to be placed on the use of preventive medicines through Government veterinary hospitals and dispensaries, with a focus on achieving herd immunity rather than on individual animal treatment.

UNDP co-operation

50. The livestock sector has been an area of major concentration for UNDP assistance during the last five years, and UNDP has funded a series of projects which have identified the problems and suggested development policies. The national plan for co-ordinated livestock development is a valuable point of reference and identifies many new projects to be undertaken in the coming decade. The feed project discussed in paragraph 36 is now operational, and for the major livestock production province of Punjab a series of interlocking proposals are to be made including disease surveillance, adaptive research including irrigated pasture studies, and the strengthening of livestock extension services.

51. UNDP may be requested to assist in the improvement of meat and milk supplies as well as milk processing and collection centres. A project is planned for the development of Karakul sheep in Baluchistan. UNDP intercountry funds may also be used for the establishment of a regional buffalo breeding centre in Pakistan during the third cycle.

52. A UNDP-supported national programme for the development of rural poultry (PAK/74/067) has successfully completed its initial work in two provinces, and in two other provinces has stimulated further investment and identified additional support requirements. Similarly a project (PAK/69/545) in support of the Poultry Research Institute in Karachi has led to the local production of poultry vaccines, and further assistance for vaccine production may be requested. As a result of a successful rural poultry training programme for women (PAK/74/067) in Azad Kashmir, it is likely that similar assistance for other provinces will be requested.

(e) Forestry

53. Only 3.7 per cent of the total land area of Pakistan is under forest (2.95 million hectares), meeting 40 per cent of the timber and 10% of the fire wood requirements of the country. In addition there are 10 trees per hectare in irrigated areas and 5 trees per hectare on barani land, providing 30 per cent of the small timber and 90 per cent of the firewood requirements. The indiscriminate cutting of trees causes serious degradation of upland grazing areas. The new agricultural policy prescribes a bigger thrust towards the establishment of tree plantations of fast growing species in areas outside forests, development of fuel wood plantations on waste land, involvement with large scale tree plantations, management of wild life, scientific forest harvesting, increased production of industrial wood, and development of national parks.

54. Of particular concern at a present time is the devastation of watershed areas in North-West Frontier Province (NWFP) and Baluchistan resulting from the massive influx of Afghan refugees. Special programmes are under consideration to limit their damage to forests and upland grazing areas.

UNDP co-operation

55. UNDP has been assisting in this sector during the second half of the second cycle in supporting the Forestry Preinvestment Centre in NWFP (PAK/78/038), in watershed management education at the Pakistan Forestry Institute (PAK/78/036) and in a forest development programme in Hazara Division (PAK/80/002) in association with an IDA credit of US\$1.7 million. Particularly important has been the effort to improve forest inventory techniques in order to assess accurately the available resources.

56. Another high priority area has been watershed and range management projects, which have received very substantial support from World Food Programme (WFP) over a number of years. Real progress is being made and, apart from the ongoing training of undergraduates and graduates at the Pakistan Forest Institute (PAK/78/036), further assistance with watershed management training may be requested at the technician level.

57. Other areas for possible UNDP support include scientific harvesting, introduction of fast growing species, experiments for production of firewood and community forestry, sericulture research and wildlife conservation.

58. UNDP intercountry funds may also provide supplementary assistance to a project on forest inventory training (RAS/79/099), and as well as basic data for policy planning and decision-making. Use may also be made of the Forest Industry Advisory Group, with funds from the interregional programme.

(f) Fisheries

59. Fisheries, both fresh and sea water, provide the livelihood of a large number of fishermen and act as a major source of the population's supply of protein. With the exclusive economic zone (EEZ) stretching 200 miles offshore, there is great potential for the development of marine fisheries through the improvement of the fishing fleet and fishing gear. Knowledge of the EEZ potential for exploitation is

at present superficial. The new agricultural policy limits public sector involvement to the identification and location of fishing grounds and the development of gear and craft, extension services, credit and improved processing facilities.

60. At present only 30,000 tons of fish per annum are exported from coastal and near coastal waters and use of mechanized and larger modern boats would increase the catch very substantially.

UNDP co-operation

61. UNDP is successfully assisting in the modernisation of the traditional fishing fleet of the Mekran Coast of Baluchistan under the project PAK/77/004. Through the Marine Fisheries Institute, UNDP has also been requested under the project PAK/77/033 to co-operate in an extensive research programme on the EEZ. Assistance may also be required for development of inland aquaculture in association with ASDB, and close contacts will be maintained with the intercountry project, small-scale fisheries promotion (RAS/77/044).

(g) Rural development and related institutions

62. The Fifth Five Year Plan emphasises, as spelled out in the World Conference in Agrarian Reform and Rural Development (WCARPD) Conference, the rural development constituent in the development effort. Attention has been focussed on the basic human needs of the rural sector through a programme delivering potable water, sanitation, basic health care and school education linked with development of an infrastructural base of rural roads, village electrification and improved communications, for ensuring community participation in rural development programmes. In 1980, elections were held at the village level for 4,300 union councils, and the training of council leaders and village level staff for these councils is a major requirement.

63. The need for small farmers to be more actively involved in the agricultural marketing and services system has long been recognized and some progress has been made with the development of co-operatives.

UNDP co-operation

64. UNDP is already assisting the Northern Areas Administration in a programme to promote self reliant development in three remote impoverished subdivisions of Gilgit District (PAK/80/003). The project will continue in the third programming cycle to increase production of food grain, cash crops and poultry, introduce improved methods of food processing, improve and develop irrigation systems, and provide market roads. Other remote areas of Pakistan may require assistance in similar fields during the course of the third cycle.

B. Natural resources

(a) Water resources

65. The Fifth Five Year Plan identified drainage and reclamation, surface and ground-water irrigation, flood control and water management as the main water resource sector priorities.

66. These were further refined as a result of the Revised Action Programme for Irrigated Agriculture completed in May 1979 with UNDP/World Bank support. Studies conducted under this programme revealed, inter alia, that as much as two thirds of the surface irrigation water was being lost due to inefficiencies in the irrigation system. Major emphasis is therefore now being placed by the Government on the rehabilitation of the existing irrigation system and on the promotion of water course improvements. Improved management of the whole delivery system for irrigated water is also required, and a shift of emphasis to private sector tube-well development in sweet-water areas is another major policy change.

67. Following completion of the Tarbela Dam repairs, further consideration is now being given to the implementation of new surface-water storage projects on the Indus. The ground-water investigations in Baluchistan approved under the Fifth Five Year Plan will be continued, and multi-purpose valley development investment plans prepared on the basis of water availability. Ground-water programmes will also be developed in other areas of Pakistan. Flood forecasting and flood protection programmes continue to carry a very high priority and major improvements have already been achieved during the Fifth Five Year Plan period.

UNDP co-operation

68. In continuation of the assistance provided in the second cycle, UNDP may be requested to follow up the co-operation with the Revised Action Programme for Irrigated Agriculture with training in water systems management through computer modelling and further support to perspective planning in the irrigated agriculture sector, with particular reference to the more backward areas outside the Indus system.

69. Likewise, UNDP co-operation with the Hydrogeological Directorate of WAPDA with ground-water exploration of selected areas in Baluchistan (PAK/73/032) will be completed during 1981 but may be requested to cover technical assistance in association with a World Bank/IDA credit for a proposed minor irrigation and valley development scheme based on all available sources of water. These would involve the use of tube-well, surface-, traditional karez, and flood-water harvesting techniques and WFP assistance is envisaged with the labour intensive works involved. Further co-operation with water development and management in Baluchistan may be provided in the form of specialist planning advice as well as training and equipment to the provincial authorities.

70. The problem of waterlogging and salinity are immensely complicated, and while the Government has made and will continue to make very substantial investments in established curative and preventive systems, a great deal of basic and applied research still remains to be done. The Government wishes to establish an International Institute for Waterlogging and Salinity Research in Pakistan and may seek assistance from the UNDP interregional programme for this purpose.

71. It is intended to continue the related applied research in the management of water and land resources currently being conducted at the Mona Reclamation Experimental Station, and UNDP assistance may be requested to support these activities. The establishment of a similar station at Tando Jam in Sind is also under consideration.

72. Meanwhile, pre-investment studies are required for special salinity control and reclamation projects (SCARPS) in a number of the most seriously affected areas. The more urgent of these will be tackled under a project, whereby UNDP provides funding for pre-investment activities for execution by the World Bank with a view to ultimate capital investment from international or bilateral sources.

73. UNDP assistance has been requested for studies leading to increased surface-water storage capacity for the Indus system, and an approved project (PAK/80/012) provides for detailed engineering and project design studies for the multi-purpose Kalabagh Dam project. The dam, on completion, will provide Pakistan with a greatly increased irrigation storage, flood control and hydel capability.

74. During the second programming cycle, UNDP assisted the Government in establishing a River Forecasting and Flood Warning Centre (PAK/74/027) in Lahore in collaboration with the Government of the Netherlands, which also provided substantial inputs. The Centre is now providing advance notice of floods through the use of weather radar, automatic telemetering equipment and computerized flood models. Further assistance in this field is envisaged for the third cycle with improved riverflow measuring equipment, snow hydrology and hill torrent forecasting.

75. Finally, the Government wishes UNDP to continue under PAK/80/004 with the financing of ad hoc training of senior officials of WAPDA initiated under PAK/74/044, particularly in dam monitoring and other sophisticated engineering and water management techniques.

(b) Energy

76. A recent review of the component breakdown of the energy sector shows that the share of gas was 41.9 per cent of the total; that of oil, 36.3 per cent, hydroelectricity, 16 per cent, coal, 5 per cent; and nuclear electricity, 0.2 per cent. Thus gas and oil continue to be leading sources of energy for the country, meeting around 78 per cent of its total requirements.

77. Consumption of commercial energy during the Fifth Five Year Plan period is estimated to grow at an annual rate of 8 per cent, mainly to be met from oil, natural gas coal and electricity. The latter three sources are indigenous, while 90 per cent of the oil is imported, presently costing about US\$1.5 billion annually, causing an exorbitant pressure on the balance of payments. In view of this alarming position the Government is according high priority to the development of the energy sector, particularly with a view to maximizing indigenous sources.

78. The main development objectives for the sector during the plan period are:

(a) Maximum priority to hydel generation and commissioning of ongoing hydroelectric projects;

(b) Transmission of bulk power from Tarbela to the southern part of the country on extra high voltage transmission lines;

(c) Priority to industrial and agricultural connexions and to stepping up the pace of rural electrification;

- (d) Intensive exploration for indigenous resources of fossil fuel;
- (e) Quick development of discovered and proven oil and gas fields;
- (f) Expansion of gas consumption for industrial use;
- (g) Maximum use of coal resources;
- (h) Reduction in the consumption of middle distillates, i.e. kerosene and High Speed Diesel (HSD);
- (i) Provision of adequate transportation capacities for Petroleum Oil and Lubricants (POL) movement to and from south; and,
- (j) Development of adequate storage upcountry to ensure uninterrupted POL supplies.

79. Within these targets it is planned to devote substantial resources to the exploration and development of new oil and gas fields and to the more rapid development of existing fields. In addition, efforts will be made to promote the use of Liquid Petroleum Gas (LPG) where the output is expected to be considerably in excess of the anticipated demand. Plans for refining crude oil will be reviewed to accommodate the larger availability of indigenous crude, mainly in the North. Also, arrangements for the transportation and storage of oil will be strengthened to ensure that growing demand is met smoothly. Efforts will also continue for the development of coal uses and for research and demonstration of unconventional sources of energy.

80. The Fifth Five Year Plan envisages a 66 per cent increase in the demand for electrical power, which is to be met by installing 2255 (MW) of additional capacity. This is slightly more than the demand increase because of the variable nature of hydro capacity. The emphasis is on supplying electricity to the maximum possible number of rural consumers rather than on concentrating on the number of villages without any regard to the number of beneficiaries, as has been the tendency in the past. Coverage to the rural population is estimated to range between 20 to 50 per cent of the population of villages electrified. The over-all target for village electrification is about 1000 per annum.

UNDP co-operation

81. In pursuit of these objectives the following areas have been identified for UNDP assistance and co-operation:

- (a) Planning and design for the multi-purpose Kalabagh Dam project;
- (b) Training and research for the introduction of new technologies for power generation and power system analysis;
- (c) Studies on renewable energy technologies for rural areas;
- (d) Energy conservation in industry;

(e) Updating of the 1975 energy resource survey; and

(f) Strengthening of the Government's energy planning capability.

82. Of the above areas selected by the Government for UNDP assistance, many are still in the conceptual stage and will be further refined and formulated during the course of the third cycle. Details of projects currently under implementation are given below.

83. UNDP assistance has been approved for a major pre-investment activity with the multi-purpose Kalabagh Dam project (PAK/80/012), through detailed engineering studies, project planning and design, and the preparation of cost estimates and tender documents. The Kalabagh Dam, when completed in 1993, will provide a major new hydro-generating facility as well as a greatly increased irrigation and flood control potential on the Indus river.

84. During 1975, UNDP assisted the Government in undertaking an energy resource survey. A report was produced which contained an historical analysis of energy consumption, production and supply and an assessment of indigenous resources and projections, including guidelines and a programme of specific actions in the energy sector. Since 1975, the international prices for petroleum have increased rapidly, exploration activities have accelerated, resulting in availability of much more comprehensive results, and changes have also taken place in demand patterns. There is thus need to update the survey on the basis of developments within the energy sector during the period 1975-1981. The updated survey is scheduled for 1982.

85. Recently the UNDP-supported project, Experimental Demonstration of Renewable Energy Technologies for Rural Areas (PAK/80/033), has been approved to test the utilization of various renewable sources of energy such as solar, biogas, biomass and wind. The relevant technologies will be examined in four rural locations offering differing possibilities for their application. The project is to be launched with UNDP assistance in the form of equipment, experts, training, etc. Its successful application could reduce use of animal wastes as direct fuel for cooking, thus allowing for a restoration of soil fertility, and decrease the use of wood for cooking, which could reduce deforestation and contribute to the stabilization of soil.

86. A parallel project, covering electricity generation through solar power, is being executed with the European Economic Community (EEC).

87. Conservation of energy is another important areas of UNDP co-operation. In this connexion the Government has already initiated a proposal which is presently focussed on data collection for the conservation of existing energy resources. Another area of concentration will be the conservation of energy in industry.

88. A need has also been identified to strengthen the Government's capability to manage the energy sector and to tackle the task of comprehensive energy planning. UNDP assistance may be requested in this important area and use may also be made of the regional energy co-operation programme.

89. Finally, the energy sector will be included in the UNDP/World Bank investment project, which is designed to enhance the capacity of WAPDA and other government institutions to prepare and implement an investment and pre-investment programme.

/...

(c) Minerals

90. The mineral sector has enjoyed a relatively small share in the development programmes of the country until recently. The country has had to resort to imports in order to meet the basic needs of industry. Insufficient geological mapping, lack of exploration equipment, shortage of trained and experienced personnel and inadequate financial resources, particularly the non-availability of risk capital, have been the main constraints.

91. The present development of minerals is strongest in non-metallic minerals such as coal, phosphate, limestone, gypsum, china clay, marble, etc., but preliminary exploration has also indicated very encouraging prospects for metallic deposits such as iron ore in Nokundi, copper in Saindak, baryte, lead and zinc in Khuzdar, and antimony and mercury in Pishin.

92. Major mineral deposits which will receive attention for development and commercial exploitation during the Fifth Five Year Plan period include copper, iron ore, gypsum, bauxite, high illuminous clay, salt, gemstone, rock phosphate and coal.

UNDP co-operation

93. Under the second country programme, UNDP assistance was focused on the following projects: (a) Saindak Integrated Copper Development (PAK/78/022) and (b) Strengthening of the Geological Survey of Pakistan (GSP) (PAK/79/016).

94. The Saindak Copper Development project is being implemented by the Resource Development Corporation (RDC), specially created with the charter to develop the Saindak Porphyry Copper deposits in Baluchistan. The investigations and feasibility study have been completed with UNDP assistance and substantial financial support from the Governments of the Netherlands and the United Kingdom of Great Britain and Northern Ireland. In the course of these activities the RDC developed a very competent professional team as well as an excellent analytical laboratory, and an impressive drilling capacity. Further UNDP assistance is envisaged with laboratory equipment, the planning and design of the mine and with specialised legal advice for the negotiation with prospective investors.

95. Assistance to the Geological Survey is concentrated on the detailed exploration and preliminary evaluation of several deposits of porphyry copper-molybdenum and lead-zinc barite. UNDP is providing exploration geologists, training, fellowships and study tours to its personnel and specialized equipment, in particular a geochemical laboratory in Karachi.

96. Apart from this ongoing programme, UNDP may be requested to assist during the third cycle with the following activities: (a) further exploration of the Chagai Copper deposits; (b) further strengthening of GSP in the fields of petrology, mineralogy, geophysics, and printing and publication capability; (c) studies on the commercialisation of non-metallic minerals, e.g. the use of gypsum for the construction industry; and, (d) feasibility study for the development of potash brine deposits for the fertilizer industry.

97. Close contacts will be maintained with UNDP-funded intercountry projects, particularly with the Regional Mineral Resources Development Centre (RAS/81/116) and the programme for the use of remote sensing (RAS/81/134).

C. Human resources

(a) Manpower and Employment

98. The estimated labour force of Pakistan is about 23.7 million, of whom 12.8 million (54 per cent) are in the agricultural sector, 4.3 million (18 per cent) are in the industrial sector, and 6.6 million (28 per cent) in the services sector. The rural labour force constitutes nearly 74 per cent of the population. The present estimates suggest that by the end of the current plan period, the labour force will have increased by 4 million over the five-year period, in addition to which there are 0.8 million who are already unemployed. Imbalances in the development of the urban and rural areas have led to distortions which generate a flow of unskilled rural workers to the urban areas, adding to the numbers already employed in low productivity jobs.

99. While both unemployment and underemployment exist in various magnitudes, the country is at the same time experiencing a shortage of skilled labour as well as of technical and managerial personnel. This is largely due to the substantial migration of trained manpower to the Gulf States, where it is estimated that 5 per cent of the total labour force are currently absorbed. The Government does not wish to impede this labour force migration and intends instead to limit the adverse effects by replacing lost skills through expanded training programmes.

100. The development objectives drawn up in the Fifth Five Year Plan focussed on the efficient utilization of all available national manpower potential and a major emphasis was given to the generation of productive employment. Increases in rural employment were to be provided through the promotion of small and agro-based industries, the development of appropriate technology and the employment of women in cottage industries.

101. One of the major objectives of the Plan was the need to expand and intensify technical and vocational training programmes to provide labour with the necessary skills to meet the demand of both domestic and foreign labour markets.

102. Existing facilities to provide this training are inadequate in both physical and qualitative terms. While the total demand for skilled and semi-skilled workers for both domestic and foreign markets is around 100,000 annually, only 10,000 come from the existing ten technical training centres, 25 Government vocational institutes, and the crash training programmes. The quality of this small output is also questionable. The private sector recruits only 16.8 per cent of the graduates from those institutions, even in the face of acute labour shortages, while 74.6 per cent of managers in both public and private sectors consider this output as unsatisfactory.

UNDP co-operation

103. Against this clearly established need to improve the quality and quantity of skilled labour, UNDP assistance during the second cycle was directed specifically

towards the restructuring and expansion of manpower training programmes. A small project to assist with the application of modular and accelerated training systems (PAK/77/002) was initiated in May 1977 to supplement the Government sponsored crash training programmes. However, the infrastructure needed to co-ordinate and implement these programmes was inadequate and a greatly expanded skills development project was therefore developed not only to strengthen the activities of the National Training Board but to help it develop the necessary legislation and regulations for introduction of a uniform national skills training programme.

104. Considerable progress has been achieved, national legislation has been enacted, national and provincial training boards are in place, and the technical training centres are being fully equipped. In continuing support for this programme, UNDP assistance will be merged into a new vocational training project, National Vocational Training Project (PAK/80/014), which is to be implemented in association with an IDA credit of US\$25 million (the formulation of which was a by-product of the previous project).

105. In addition to the over-all development of national skills, a UNDP-assisted project to promote workers' education has been fully operational since October 1981; an ongoing project in support of the national Institute of Tourism and Hotel Management, Tourism Management (PAK/75/067), will be extended into the third cycle.

106. Partly as a result of labour migration, but also as a function, in part, of unfavourable economic conditions and the resultant need to reduce costs and increase productivity, there is a need to upgrade the effectiveness of management in Pakistan, particularly in the public sector. The Ministry of Production has developed a manpower and training policy for the public sector corporations which will ensure a regular staff training and upgrading programme in line with career development plans.

107. Other proposals for UNDP assistance have been put forward in such fields as the development of comprehensive social security systems, and studies in employment promotion. Possible institutional support may also be required for manpower planning through the Pakistan Manpower Institute, training in mine supervision and rescue, and occupational safety and health. Use will be made of the Asian and Pacific Skill Development Programme (APSDEP) (RAS/78/031), Strengthening Labour Administration for Manpower Development (ARPLA) (RAS/78/059), and Asian Employment Programme (ARTEP) (RAS79/079) intercountry projects.

(b) Education

108. The development objectives as laid down in the Fifth Five Year Plan incorporate the basic themes which have run through successive development plans and policies. These are broadly: (a) universal primary education; (b) development of technical and vocational training to meet requirements for middle-level skilled manpower; (c) improving the relevance of curricula in secondary and higher education to employment needs, through greater emphasis on science, mathematics, and technology; and (d) a more balanced development of the education system at all levels by reducing resource allocations to higher education.

109. Although these themes again form the basis for the New Education Policy announced in 1979, some shifts in priorities have been introduced, notably towards

primary education by ensuring that 31 per cent of total finances available for education will be devoted entirely to this sector.

110. The Policy proposed a development strategy involving provision of additional facilities to attain universalization of primary education for boys by 1986-1987 and for girls by 1992. Although enrolment in primary education has increased 7 to 8 times since the country's independence, the absolute number of children in the relevant age group not enrolled in primary grades has also increased due to the rapid population growth. Low enrolment is further aggravated by a high drop out rate (specially among girls), irrelevant curricula, lack of proper teaching aids and equipment, poor physical conditions and the general apathy of teachers towards education. Added to these factors are the social inhibitions towards female education.

111. The Policy therefore stressed not only an improvement in curricula and elimination of wastage, but it emphasized further the need to create strong management capabilities at the local level. For the first time, traditional and indigenous institutions such as mosque and mohalla schools were also identified as potential learning places for out of school children.

112. At the secondary and higher levels, emphasis was placed on consolidation and qualitative improvement rather than on expansion in numbers. A principal step was aimed at reorienting secondary courses by introducing agro-technical courses. Crucial to all these changes was the need to improve the quality of teachers and teaching methods both pre-service and in-service. This it was hoped would be the core of the reforms being introduced through upgrading and enriching teacher training programmes.

113. Overly rapid growth of higher education facilities has resulted in the deterioration of academic standards. In order to improve this situation, the new policy emphasis was on the consolidation of existing universities, the strengthening of centres of excellence and advance studies. Other changes were expected to lead to the improvement of curricula, and the restriction of admissions at the university and post graduate level by means of harder entrance examinations.

114. In the vocational and technical fields efforts are to be made to achieve greater relevance to employment possibilities and increased participation of the private sector. In spite of several attempts in the past, technical and vocational education is still not job-oriented. A decision to introduce production-oriented curriculum at all technical and vocational institutes was therefore taken.

UNDP co-operation

115. Within the Government effort to enhance the quality and quantity of education, there were three major areas in which UNDP co-operation was required. None was more critically important than the need to improve the understanding and skills of the nation's teachers. The second was the revision and improvement of curricula, again inseparably related to the improved training of teachers. Thirdly, the capacity for modern educational planning in Pakistan was not only limited but the system needed to benefit from modern management techniques.

116. In the course of the first country programme UNDP co-operated with the Quaid-i-Azam University, Islamabad, in establishing and strengthening its natural science departments under the project, Assistance to the University of Islamabad (PAK/69/547). During the second cycle this task has been substantially achieved. This programme will be continued in the third cycle.

117. While momentum has been achieved in teacher training, supervision and some curriculum development, planning and management has remained neglected. Nevertheless, there has been an outstanding contribution made by the project, PAK/77/009, covering the reform of education administration. The project, inter alia, contributed to the establishment of a management information unit at Peshawar, including the provision of a computer and a multi-tiered training programme in data collection and management. The cost of this breakthrough, which has attracted attention from other provinces, was small and it was carried out almost entirely by national personnel.

118. During preliminary discussion for preparation of the third cycle it was noted that the impact of the UNDP assistance during the second cycle had been diminished due to the fragmentation of an otherwise generous input. In looking at the future, the Government has decided to select areas of concentration that at the same time are priorities for each of the provincial education departments. With a finer focus and more concentrated effort it is hoped that the impact of UNDP assistance will be maximized.

119. Against this background the following major areas have been identified for possible UNDP collaboration for the third cycle.

(a) Improvement of supervisory services;

(b) Development of a nationwide information system for education (an extension of the ongoing reform of education administration project.

(c) Development and improvement of science education in the primary and secondary levels (to cover teacher training, text book improvement, laboratory equipment); the possible establishment of a national science education centre to maximize the use of the existing National Equipment Centre;

(d) Possible continuation with expanded objectives of the ongoing applied science project at the post graduate level at the Quaid-i-Azam University (PAK/77/010); and

(e) Strengthening of technical and vocational education, including institutions of special education for the handicapped.

(c) Science and technology

120. A prime sectoral objective of the Fifth Five Year Plan is to improve the technological capability of Pakistan and to reduce dependence on imported technology. Emphasis will be placed on the application of science and technology in solving practical problems and improving production processes. Linkages with production units will be strengthened and technologies appropriate for local conditions will be promoted. A strong scientific and technological information system will be developed.

121. Within this framework of objectives, a new national science and technology policy is being formulated which will pay particular attention to the federal and provincial structure of the science establishment. Greater autonomy and intellectual freedom will be encouraged, research and development (R & D) centres in industry will be promoted and international contacts developed. Increasing rewards for scientists and improved career opportunities will also be pursued.

UNDP co-operation

122. The Government has sought UNDP assistance in the strengthening of the National Institute of Electronics, which was established in 1979 to undertake the design and development of a variety of electronic products with a view to initiating or expanding their local manufacture. UNDP has financed a study on the technical requirements of the Institute, Assistance to the National Institute of Electronics (PAK/80/038) and further follow-up activities may be sought by the Government in the third cycle.

123. Pakistan has long recognized the need for a fully co-ordinated but decentralised information system to handle and deliver scientific and technological information. The system would take the form of a network of co-operating institutions to be co-ordinated by the Pakistan Scientific and Technological Information Centre (PASTIC) in Islamabad under project PAK/75/064. UNDP has provided assistance with the initial planning of the Centre during the second country programme period and further co-operation may be requested during the third cycle.

124. Within the context of its sectoral priorities, but from separate finance provided by the Interim Fund for science and Technology for Development, the Government has requested UNDP assistance in the establishment of a silicon technology centre. The Centre's prime task will be to sponsor R & D activities in silicon technology with a view to promoting local production from indigenous silicates, thus enabling the country to participate fully in the advantages of the new silicon-based energy revolution. These activities will be pursued through the third cycle.

125. Apart from the above-mentioned ongoing projects, UNDP assistance is envisaged in institution building and for support to the science and technology sector. This might take the form of modernization of pilot plants in the laboratories of the Pakistan Centre for Industrial and Scientific Research (PCSIK); and support for various development projects sponsored by the Appropriate Technology Development Organization (ATDO), the Pakistan Science Foundation (PSF), the Irrigation Research Council (IRC) and the National Institute of Oceanography (NIO).

(d) Health

126. The main health risks faced by the population of Pakistan are widespread. The common ones are: communicable diseases, moderate to severe malnutrition particularly among growing children and women of reproductive age, excessive infant and maternal mortality, and the lack or inadequate facilities for waste disposal and clean water supply. While this description applies to urban slum areas, it is the rural poor (over 70 per cent of the total population) who are most affected by these conditions.

127. Important constraints to improving health conditions in general are inadequate health coverage and health education. Available statistics indicate the poor facility-population ratio in terms of doctors, nurses, hospitals, basic health centres, water supplies and sanitation.

128. Faced with such a situation in the health sector, the Government drew up the following objectives for the Fifth Five Year Plan: (a) to make available the modern health coverage within a 2 to 4 mile distance to the entire population, compared with the present 50 per cent; (b) to reduce the crude death rate from the present 14.0 per 1000 to about 10.2 per 1000; (c) to reduce the infant mortality rate from 105 per 1000 live births to 79 per 1000; and (d) to increase life expectancy from 54 to 60 years for men and from 53 to 59 years for women.

129. During the Fifth Five Year Plan, the extension of health services was to be achieved by a substantial shift from the present doctor-oriented strategy to a three tier system consisting of doctors, paramedical and community health workers. In terms of physical facilities, it was to be based on a network of basic health units with a three tier referral system composed of rural health centres, tehsil hospitals and district hospitals.

130. Emphasis under this new health scheme was on the shift from curative to preventive measures aimed at the reduction of communicable diseases through mass immunization, improvement of environmental sanitation and anti-malarial activities to be supported by health education. These programmes were to be fully supported and served by other programmes in housing and nutrition.

UNDP co-operation

131. During the second cycle collaborative activities and objectives for assistance from the United Nations system were based on the national needs and policy directions reflected in the Fifth Five Year Plan. The World Health Organization (WHO), through its regular programme, focussed its efforts on the provision of technical and other assistance for the promotion of primary health care activities such as: communicable disease control, including tuberculosis, malaria and leprosy control; promotion of research on tropical disease; promotion of maternal child health services; and an expanded programme of immunization against six preventable childhood diseases. Focus was also laid on nutrition, drinking water supplies and sanitation, recognition of environmental hazards and the development of occupational health and industrial hygiene activities. The United Nations Children's Fund (UNICEF) and the World Food Programme (WFP) have also made substantial contributions with water supplies, nutrition and immunization programmes.

132. In the area of environmental sanitation, UNDP assisted the Government in the training of public health engineers at the Institute of Public Health and Research established in Lahore during the first cycle. The project, Institute of Public Health Engineering and Research (IPHER) - Phase II, Lahore (PAK/78/052), was successfully concluded at the end of the second cycle, but further assistance for the Institute may be requested in connexion with programmes for the International Drinking Water Supply and Sanitation Decade (IDWSSD).

133. UNDP, in collaboration with the Government's Planning Division and WHO, will assist in the updating of the 1975 water sector study. One of the important objectives of this study is to identify further investment opportunities in this field, including the possible planning of water supply and sewage schemes for urban areas. (See also paragraph 169.)

134. During the second cycle, under the project, Development of Orthotic and Prosthetic Services (PAK/73/001), UNDP assisted the Fauji Foundation Medical Centre in Rawalpindi in setting up an ortho-prosthetics workshop for manufacturing artificial limbs and orthotic appliances for the physically handicapped. The project was an outstanding success, and similar assistance to the Mayo Hospital in Lahore has already been approved, with interest also being expressed by the provincial authorities in NWFP for another project with the Khyber Hospital.

135. Other areas identified for possible UNDP assistance in the third cycle are: health education, research and studies on rural health practices, training in narcotics rehabilitation, institutional support for a number of medical colleges, the establishment of medical research centres and assistance with the production of human diploid cells rabies vaccine at the National Institute of Health.

D. Industry, trade and tourism

(a) Industry

136. The manufacturing sector is the second largest commodity producing sector in Pakistan. Industry contributes about 16 per cent to GDP and employs approximately 18 per cent of the total labour force. Industrial production continues to expand, with the rate of growth in medium- and large-scale industry more than doubling in the last financial year.

137. Government policies have contributed substantially to the recent upturn, and high priority has been given to completing and consolidating major public sector projects and encouraging the private sector to play its full role in the industrial development of the country. The improved financial performance of public sector enterprises resulted basically from the decentralization of management decision, the sale of some public enterprises to private owners and the closure of plants which had few prospects or improvement. The measures have begun to yield results and there has already been an encouraging improvement in the profitability of public sector enterprises.

138. The promotion of a rapid expansion in private investment in the industrial sector is considered a central part of the Government's strategy for economic development through the 1980s. The Government's revised attitude towards the private sector, combined with its success in stabilizing short-term economic conditions, has already helped to bring about a welcome recovery of private investment from its extremely depressed level of the mid 1970s. However, the recovery to date has brought to light the increasing difficulty of meeting the requirements of finance, infrastructure and skilled manpower necessary to support this accelerated rate of investment.

UNDP co-operation

139. These industrial sector priorities call for extensive feasibility studies, shop floor technical assistance and training, and an emphasis on industrial management and specialized industrial training. UNDP assistance will be geared to those activities in accordance with the priorities in each subsector. These include downstream activities based on the Karachi steel mill, improved capacity utilization and in-plant training, energy conservation schemes, the development of the capital goods industry and small-scale industries development under the technical assistance component of a loan from the International Bank for Reconstruction and Development (IBRD).

140. Activities concerned with the capital goods industries include surveys of priority requirements that can be locally produced using the existing installed facilities. The updating and analyzing of this information will be extended during the third cycle with additional UNDP inputs to produce master plans in the selected five sectors (agriculture, textiles, transport, construction machinery and machine tools). Some feasibility/investment studies will also be implemented to cover the identified new demands and to substitute for part of the imports required, especially in transport and agricultural machinery.

141. Trucks, tractors, buses, jeeps, cars and motorcycles are currently being manufactured under licenses by the Pakistan Automobile Corporation (PACO). It is intended that the present assembly activities should be gradually replaced by local production with a target of 80 per cent of components to be reached in eight years time. UNDP assistance is required in two distinct areas: first, to improve the production of PACO units; second, to develop vendor activities and provide facilities to private enterprise in the fields of design, technical processing, inspection and quality assurance.

142. As part of the Government's drive to stimulate private sector investment, the Investment Advisory Centre of Pakistan (IACP) has been supported by UNDP technical co-operation in the second cycle, under project, Assistance to Investment Advisory Centre of Pakistan (PAK/75/062). It is expected that this assistance in the third cycle will take the form of training in the fields of management consultancy, diagnostic services and the preparation of feasibility studies and investment portfolios.

143. The assistance provided in the second cycle to the Cotton Textile Research and Development Centre (PAK/71/562), particularly with the shop-floor training of fitters and weavers, has made a definite impact. An extension of these shop-floor training activities through the third cycle is required to cater for the needs of the numerous individual textile mills in the private sector. Greater use of local trainers will be made as the programme develops.

144. The leather and leather products industry is the fourth biggest foreign exchange earner for Pakistan. Most exports are presently in the form of wet blue hides and skins and there is a clear need to increase the value added by expanding the local production of leather products. The Leather Garment Development Centre achieved some success in developing the designs and finish of leather garments for manufacturers, which enabled them to receive bigger and more lucrative foreign

orders, under the project, Leather Industry Development (PAK/73/027). The Centre is extending the garment activities in the third cycle and will also cover products for both local consumption and exports.

145. A national scheme is also being prepared to promote all techniques involved in leather processing, including specialized tanning and the development of footwear as well as the marketing of products. The scheme will focus initially on the establishment of a new Institute of Leather Technology in Karachi.

146. The Master Plan for Iron and Steel is being prepared under the UNDP-financed project, Preparation of Master Plan for Iron and Steel Industry (PAK/79/020), to identify the needs for iron and steel over the coming 20 to 30 years, together with the economic production processes and appropriate engineering projects. This will involve extended UNDP assistance to the State Engineering Corporation to cover the additional specialized fields needed for its units, State Engineering Corporation (PAK/75/071). Assistance to the metals advisory services, which brought about marked improvements in the steel making techniques in a number of plants and a reduction in both production costs and rejection rates during the second country programme Metal Advisory Services II (PAK/77/018), will also be continued into the third cycle.

147. UNDP assistance may be required to introduce and promote the production of special steels in private enterprises to diversify the products and meet demands now being covered through imports. To improve the economy of steel production, studies are needed on the beneficiation of locally available igneous iron ores from Baluchistan and the feasibility of using the product as a blend for imported ore or for sponge iron production. Similar studies are also required on the utilization of local materials to replace imported refractories.

148. A national scheme for industrial training and the development of manpower is needed to prepare industrialists for the new production programmes and, at the same time, to assist in meeting the challenge of the continuous migration of Pakistani specialists.

149. The key common factors involving underutilization of industrial resources are connected with management practices. The establishment of a management information system, planning and statistic cells at the federal ministry, corporation and unit levels is required to assist decision-making, inventory control, the choice of product mix and the economising of product costs. Some UNDP assistance is anticipated in the establishment of this improved management infrastructure.

(b) Trade

150. The short term balance of payments outlook at the beginning of the medium-term investment programme 1982-1984 has been improved by present demand management policies, the conclusion of the Extended Fund Facility Agreement with IMF, an agreement on short-term debt relief with bilateral members of the Pakistan Consortium, a sharp increase in workers' remittances, and receipts from countries members of the Organization of Petroleum Exporting Countries (OPEC). The Government will continue import substitution policies and intensive efforts to close the gap between imports and exports. These policies are expected to continue throughout the third cycle.

151. Uncertainty will continue to characterise Pakistan's terms of trade in the light of unpredictable petroleum prices and the unfavourable global trade environment. The impact of the new import liberalization policies cannot be readily determined, although growth in the volume of imports is expected to level off. Exports are now expected to grow at 10 per cent per annum in real terms, having achieved during fiscal year 1980 an increase of 42 per cent in real terms, and 22 per cent by volume.

152. Against this background the Government's objective will be to increase Pakistan's share of the world markets through aggressive trade promotion and the adoption of appropriate technological modernization, particularly for agriculture and agro-based products. The volume of cotton yarn, cotton cloth and rice exports is expected to grow between 7 to 10 per cent per annum. Increased identification with regional markets in the short-term and with subregional markets in the long-term will be factors in export promotion policy, with greater emphasis in manufactured, semi-finished and other non-agricultural goods.

UNDP co-operation

153. A vigorous export promotion drive, spearheaded by the Export Promotion Bureau, is a key element in the Government's trade strategy. The Bureau has been closely associated with the International Trade Centre (ITC) through the UNDP-financed technical assistance project, Integrated Export Promotion (PAK/73/041) which became operative in 1975 and was first oriented towards market research and development training and the strengthening of functional export services. Subsequent assistance was provided with the establishment of an integrated trade information network, and with the intensive training and support of overseas trade officials. Further co-operation may be requested from UNDP during the third cycle. Close contact has been maintained with the UNDP intercountry projects dealing with Generalized System of Preferences (GSP) and trade information.

154. Advice on cotton classing and grading is also being extended (PAK/80/024) to the Cotton Export Corporation (CES) in order to improve the quality of this major export.

155. Finally, the Government may request UNDP assistance with training and study tours for senior officials concerned with the restructuring of the import management programme as required by the conditions of the IMF Extended Fund Facility.

(c) Tourism

156. The Fifth Five Year Plan has as its major objective for the tourism sector the acceleration of the rate of growth of tourist arrivals with a view to increasing foreign exchange earnings. At the beginning of the Plan period tourist arrivals were projected to increase from 220,448 in 1977-1978 to 420,631 in 1982-1983, an annual growth rate of 13.8 per cent. Similarly, the tourist earnings were expected to increase from US\$60.41 million in 1977-1978 to US\$266.9 million in 1982-1983 at an annual growth rate of 36.7 per cent.

157. While steady growth of tourist arrivals was experienced during 1977-1978, political developments in the region as well as external economic factors have had

adverse effects, resulting in a net decline in arrivals during 1980. Nevertheless the average yearly increase amounts to 11.8 per cent since 1978, while earnings have jumped from US\$82.89 million in 1978 to US\$153.93 million in 1980.

158. In order to attract more tourists as well as to prolong their stay and stimulate increased expenditure, the following strategy for the development of tourism was evolved.

(a) Substantial expansion of tourist accommodation in major cities and the development of resort areas and beaches;

(b) Development of tourism in the northern region by the construction of accommodation units, promotion of mountaineering and trekking and improvement of transport and communications facilities;

(c) Preservation of archaeological sites and historical monuments;

(d) Development of religious, cultural, social and youth tourism, with particular emphasis on domestic tourism;

(e) Development of suitable facilities in national parks;

(f) Promotion and publicity in tourist-generating markets (North America, Western Europe, Gulf States and Japan); and

(g) Training of hotel and travel trade personnel and tourist guides.

UNDP co-operation

159. Following the 1974 updating of the Master Plan for Tourist Development prepared with UNDP co-operation under the project, Tourism Planning (PAK/73/044), the Government has proceeded to the implementation, within the available resources, of many of the Master Plan recommendations. In pursuit of tourism development in the northern areas, UNDP assistance was provided with the planning of a summer resort in Kalam, and with the establishment of hill trekking facilities.

160. UNDP assistance under the project, Institute of Tourism and Hotel Management (PAK/75/067), has also contributed substantially to the strengthening of the Karachi-based Institute of Tourism and Hotel Management, which is conducting a full range of training courses within the Institute and on-the-job training at hotels throughout the country. UNDP assistance to the Institute will continue during the third cycle.

161. During 1980 a mission of the United Nations Educational, Scientific and Cultural Organization (UNESCO) prepared a comprehensive report on the conservation for cultural heritage, with special reference to the development of tourism. UNDP will collaborate with the Government in the implementation of the major recommendations of the report as requested.

E. Infrastructure

(a) Transport and communications

162. Although relatively developed, in general terms Pakistan's transport and communication sector has suffered in recent years from inadequate investment and low growth rates.

163. The Government's general strategy on transportation for the Fifth Five Year Plan period has been to emphasize improved utilization and the modernization of existing facilities and to give high priority to the completion of ongoing schemes. Large and heavily capital-oriented investments are scheduled for roads, ports, railways and air transport. Substantial investment is also planned for the communications sector, including the expansion and modernization of the telecommunications services and an accelerated programme in planning, revenue, and unit construction of the Post Office subsector.

UNDP co-operation

164. WFP is continuing to support the Government's drive to improve rural roads, and ad hoc technical advice may be required from UNDP in this area. The main thrust of UNDP assistance to the roads subsector, however, will take the form of advisory services for the negotiation and arrangement of credit facilities to domestic contractors in the road construction industry. This will be provided in association with a World Bank/IDA credit for US\$50 million.

165. The Fifth Five Year Plan also accords a high priority in the civil aviation subsector to training and the improvement of navigation aids and telecommunications. In support of this objective UNDP will be requested to continue its comprehensive assistance to the new Civil Aviation Training Centre in Hyderabad under the project (PAK/74/034), through the third cycle. This co-operation will take the form of training advisory services, fellowships and sophisticated training equipment. It is expected that the Centre, when fully operational, will be included in the network of regional civil aviation training centres which currently receive support from the UNDP intercountry programme (RAS/81/037) and has for some years provided excellent training opportunities for Pakistani technicians.

166. Further UNDP co-operation in civil aviation will be provided in the preparation of the Perspective Plan for Civil Aviation, which is designed to cover civil aviation development in Pakistan up to the year 2000.

167. In the telecommunications subsector UNDP has been assisting with the establishment of telecommunication links in remote areas (PAK/74/073). Further co-operation is also foreseen with the improvement of maritime telecommunication links. In the longer term, the implementation of the Government's Fourth Telecommunications Project 1981-1984 is expected to give rise to other technical co-operation requests to UNDP.

168. The Postal Division of the Government has indicated a need for UNDP assistance with fellowship training, equipment and other support for established training centres and short term consultancies in a number of specialized fields. The

Division will also continue to make use of the consultancy and training opportunities provided by the ongoing UNDP intercountry project (RAS/81/036).

(b) Drinking water supplies and sanitation

169. In line with the objectives of the IDWSSD, the Government prepared a paper outlining its targets and objectives for the Decade. Some of the highlights are:

(a) Against an annual allocation of about Rs700 million during 1980, the paper envisages an outlay of RS14,263 million during the Decade, or an annual growth rate of about 13 per cent over the 1980 allocation; and

(b) Specific subsectoral programmes would require;

- (i) Rs7,173 million (US\$724 thousand) to provide 100 per cent water supply coverage for the urban population;
- (ii) Due to the very low starting point (17 per cent coverage in 1980), it will be impossible to provide total rural water supply coverage during the Decade. Nevertheless, a quantum jump is expected in order to reach the 66 per cent target by 1990. This would cover an additional population of 38.17 million and involve an expenditure of Rs4,115 million (US\$415 thousand) required for the installation of hand pumps, storage reservoirs, shallow wells and piped water schemes;
- (iii) It is proposed that urban sanitation coverage be increased from about 42 per cent in 1980 to 59 per cent by 1990, covering an additional population of about 11 million and involving an outlay of Rs2,103 million (US\$212 thousand);
- (iv) The rural sanitation coverage in 1980 was almost non-existent. With maximum efforts, it is envisaged that 13 per cent of the population will be reached by 1990, covering an additional population of 8.72 million and involving an outlay of Rs872 million (US\$880 thousand); and
- (v) Of the total investment of Rs14,263 million (US\$144,070) required for the sector, the Government expects that Rs10,000 million (US\$101 thousand) will be financed internally, including resources provided by the federal/provincial governments in their development plans and resources generated by the development authorities and the local councils. External resources required for implementation of the above programme are estimated at about US\$400 million or 30 per cent of the total outlay.

UNDP co-operation

170. If the above targets are to be met, very careful planning and extensive manpower development will obviously be required. UNEP assistance has been received (PAK/81/005) and recently concluded for a comprehensive water supply and sanitation sectoral study under the leadership of the Physical Planning and Housing Section of

the Planning and Development Division. This study will be followed by concrete investment programmes. Further areas for UNDP support may also be identified, including the planning of water supply and sewage schemes for urban areas. A national conference, organised with the assistance of WHO, UNICEF and UNDP, was held in November 1981 to enhance the awareness of national leaders of the objectives of IDWSSD.

171. In regard to manpower training, it is expected that the Institute of Public Health Engineering and Research, which has received substantial UNDP assistance, will play an important role. Its activities are likely to be expanded and co-ordinated with those of various development authorities and local councils, so that the type of courses offered at the Institute can be of more practical benefit in the maintenance of water supply and sanitation systems.

172. The long association of UNDP with the Lahore Development Authority in its water supply and sewerage development schemes (PAK/72/015) is making progress towards the implementation of an investment programme supported by an IDA credit for US\$26.6 million. UNDP assistance for this programme is expected to continue during the third cycle.

173. UNICEF has been particularly active over the years in this priority field. Its activities have concentrated mainly on the provision of equipment, supplies and technical expertise for water supply schemes of low technology, with emphasis on flood prone areas and Baluchistan. An important feature of UNICEF assistance is the promotion of community participation in the construction, installation and maintenance of water supply schemes and the association of environmental sanitation with those schemes.

(c) Planning and statistics

174. Pakistan has long developed a sophisticated planning mechanism at both the federal and provincial levels: and the five year planning process was initiated as long ago as 1955. The Planning and Development Division is responsible for the formulation of both the five year plans and the federal annual development plans that control the country's development budgets. Similarly, the provincial planning and development departments contribute to the formulation of the five year plans and are responsible for preparing annual development plans at the provincial level.

175. UNDP has co-operated in the strengthening of this planning process by providing extensive overseas training opportunities for senior planning and finance staff, under the project Development Studies, Phase II (PAK/79/015). It has anticipated that this requirement will continue throughout the third cycle.

176. Assistance with the establishment of the Sind Regional Planning Organization has also been provided by UNDP under the second country programme under the project, Strengthening of Regional Planning Institutions in the Sind Province (PAK/76/006).

177. In the field of statistics, training programmes under the project, Statistical Division, Sind Bureau of Statistics (PAK/73/004), have been funded by UNDP and assistance to the Sind Bureau of Statistics provided in the form of computer equipment and training.

178. The Government will also continue to make full use of the training and consultancy facilities provided through the UNDP intercountry programme by the Asian and Pacific Development Institute (RAS/77/027) and the Statistical Institute for Asia and the Pacific (RAS/77/025).

(d) Public administration

179. The Government has identified an urgent need to reorganize and streamline the public service. To this end it has requested under project Technical Assistance for Organization and Methods Division (O&M)(PAK/80/001) UNDP support for the O&M Division, with the planning and execution of training courses within Pakistan and with overseas training opportunities for senior government officials. This programme will extend into the third cycle.

(e) Services of expatriate nationals - TOKTEN (Transfer of Know-how Through Expatriate Nationals) (PAK/78/026).

180. In order to encourage self reliance and to ameliorate in some small way the adverse effects of the brain drain, the Government decided to develop a programme to attract distinguished expatriate Pakistanis back to the country for short periods to impart their skills to their fellow countrymen.

181. UNDP was requested to assist with this programme, drawing on its experience with a similar, highly successful exercise in Turkey. The first UNDP sponsored expatriate began his assignment in October 1980 and 47 missions were completed by the end of 1981. The scheme has been an unqualified success and the Government has requested that it should be extended into the third cycle.

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