SUMMARY

The present report is submitted in accordance with Governing Council decision 89/11 of 24 February 1989, requesting the Administrator to report on a representative selection of mid-term reviews of country programmes.

The review concludes that the fourth country programme for Chile (1987-1991) remains fully relevant and that the programme itself has helped to emphasize the importance of technological development as a priority at the national level.
I. SUMMARY OF THE FOURTH COUNTRY PROGRAMME

1. The fourth country programme for Chile (1987-1991) was approved by the Governing Council in February 1987. The programme concentrated on two main objectives: (a) to support the nation's scientific and technological development; and (b) to support the Government's initiatives aimed at decentralizing capital resources, the population and the economy through a regional development policy. The programme is fully integrated with the country's strategy for scientific and technological development contained in the Chile Development Programme (1983-1989) which is oriented towards the consolidation of the bases for stable economic development.

2. In financial terms, the programme was based on total resources of $20,671,665, including a carry-over of $1,900,000 from the third cycle and $7,271,665 in government cost sharing. The amount of $1,290,000 was shown as unprogrammed reserve (see annex to the present report).

3. The principal areas selected for co-operation were: (a) those related to technological research in the productive sector, in order to support the country's import substitution and export efforts; (b) combined scientific and technological research programmes in biotechnology, genetic engineering and computer science, aimed at solving problems having a social and economic impact; and (c) training programmes in technological management for both productive enterprises and universities.

II. METHODOLOGY OF THE MID-TERM REVIEW

4. The mid-term review of the fourth country programme for Chile was carried out over a two-month period starting in mid-November 1988 and concluding in mid-January 1989. An outside consultant, who had also been associated with the launching of the fourth country programme, was engaged for approximately two weeks to assist in the preparation of the review. The review itself is the result of a co-ordinated effort of the Government, represented by the National Planning Office (ODEPLAN) of Chile, and the UNDP office in Chile, during which a thorough analysis was made of the original programming process and the identification, appraisal, selection, implementation and evaluation of the projects that make up the programme.

5. The review culminated in a seminar in which a draft of the conclusions was presented and discussed. Participating in the meeting as panelists were the Deputy Director of ODEPLAN, the Resident Representative of UNDP, the President of the National Commission for Science and Technology, and a selected representative each from the productive sectors and the universities. The directors of research from Chilean universities, authorities from the Production Development Corporation (CORFO), representatives of organizations of the United Nations system participating in the programme and national co-ordinators of the ongoing projects also participated in the seminar. The results of the review were analysed by the Chief of Division I of the regional bureau for Latin America and the Caribbean, during a visit to Chile in March 1989.
III. MAJOR FINDINGS OF THE REVIEW

6. The review concluded that the fourth country programme for Chile fully integrated in the Government's international co-operation strategy and that it is also integrated in, and represents an essential element of, the national scientific and technological development policy. This policy aims at linking more closely the knowledge and research capacity available at national universities and research centres with the demand of the productive sector through a concrete and efficient means such as joint research and development projects which the fourth country programme is supporting. In fulfilment of this objective, due attention was paid to the regional impact of the programme, 44 per cent of which was being implemented in areas outside Santiago.

7. The most salient and positive features of the country programme were seen to be: (a) the concentration of resources and efforts in the area of national scientific and technological development; (b) the participative scheme used in the selection, design and implementation of the projects; (c) the use of government execution which implies more direct and greater responsibility on behalf of the institutions; (d) cost sharing, through companies and other sources of co-operation, permitting an increase in resources for the programme and resulting in more active participation of the users in the activities carried out; (e) a stronger relationship between the national scientific and technological community and important international centres working in related areas; and (f) the possibility of including an interdisciplinary focus in projects, which implies a more efficient modality of resolving specific economic and social development problems.

8. The review pointed to the high degree of coincidence between the types of projects planned and those approved to date; 72 per cent of the ongoing projects correspond to those identified during the programming exercise. Of the 42 projects approved through December 1988, 35 were being executed by the Government through a national institution, 4 were being executed by an agency of the United Nations system and 3 were being co-executed by the Government with an associated agency of the United Nations. Some 21 projects have benefited by complementary assistance, in addition to cost sharing, from other external or internal sources of financing. Approximately 53 companies, 95 per cent of which are from the private sector, contribute through government cost-sharing arrangements.

9. The sectoral breakdown of the programme shows a concentration of projects related to agriculture, forestry and fisheries (34.2 per cent), and mining (27.9 per cent), with the rest distributed among industry (19.4 per cent), energy and water (7.7 per cent), transport and communications (4 per cent) and services (6.8 per cent). Fifteen of the projects involve the transfer of technology, 18 are engaged in technological adaptation and 9 deal with technological innovation.

10. While environmental considerations were not specified as a separate objective, five of the approved projects deal with environmental concerns. For example, the pulp and paper industry is undergoing a particularly vigorous growth period and amongst the projects in that sector, one of them is dedicated to the development of the use of non-polluting solvents.
11. The principal problems detected were related to the newly evolving relationship between the national research centres and the productive sector; the existing university research infrastructure; some administrative and management aspects of innovative technology projects; and the lack of a clear directive on patent rights which may result from some project activities. To deal with these problems, a group of three support projects were approved to provide advice and assistance where needed. A new project is being prepared to deal specifically with the problems related to inadequate research infrastructure.

IV. ADJUSTMENT TO THE COUNTRY PROGRAMME

12. The overwhelming conclusion of the mid-term review of the fourth country programme for Chile is that the programme's objectives and content continue to be valid and relevant and that no adjustments are required. The operational difficulties encountered during the first two years of implementation of a programme of this innovative nature (see para. 11 above) have been met with flexible solutions which have permitted a high degree of delivery and the full expectation that all available resources will be allocated and expended during the present cycle.
Annex

FINANCIAL SUMMARY

FOURTH COUNTRY PROGRAMME FOR CHILE (1987-1991)

I. ACTUAL RESOURCES TAKEN INTO ACCOUNT FOR PROGRAMMING

A. **Total resources taken into account for programming at time of approval of country programme**

B. **Resources taken into account for programming at time of mid-term review**

   IPF allocations
   Programme cost sharing
   Government project cost sharing
   Third-party cost sharing
   Other sources (Special Programme Resources (SPR))

C. **Net change in resources**

II. USE OF RESOURCES

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<tr>
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<tbody>
<tr>
<td>Committed resources</td>
<td>2 153 777</td>
<td>13 188 296</td>
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<tr>
<td>Project proposals</td>
<td>17 227 888 a/</td>
<td>7 545 090</td>
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<td>Unprogrammed reserve</td>
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<td>1 271 279</td>
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<tr>
<td><strong>TOTAL USE OF RESOURCES</strong></td>
<td>20 671 665</td>
<td>22 004 665</td>
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### III. DISTRIBUTION OF RESOURCES BY SECTOR

<table>
<thead>
<tr>
<th>Sector</th>
<th>In accordance with country programme b/</th>
<th>Actual at mid-term c/ (Percentage)</th>
<th>Revised plan as result of mid-term review</th>
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<tbody>
<tr>
<td>Agriculture, forestry and fisheries</td>
<td>23</td>
<td>34.2 d/</td>
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<tr>
<td>Mining</td>
<td>16</td>
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<tr>
<td>Industry</td>
<td>48 d/</td>
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<tr>
<td>Energy and water</td>
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<td>Transport and communications</td>
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<td>4.0</td>
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<tr>
<td>Services</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100.0</strong></td>
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a/ Includes programmed reserve.
b/ Based on 31 pre-selected projects.
c/ Based on 42 approved projects.
d/ Includes agro-industry.