COUNTRY AND INTERCOUNTRY PROGRAMMES AND PROJECTS

Consideration and approval of country programmes

THIRD COUNTRY PROGRAMME FOR
ROMANIA

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

Illustrative IPF for 1982-1986: $7.5 million

INTRODUCTION

1. The programming exercise for the third country programme for Romania began in October 1980 with discussions between the Ministry of Foreign Affairs which is the co-ordinating body for UNDP matters and the resident representative. In December 1980 all executing agencies were notified of the programming exercise and their recommendations for projects were invited. Most executing agencies replied and these project ideas were forwarded to the Government for consideration.

2. At the same time, the Ministry of Foreign Affairs invited all sectoral ministries to make proposals for consideration for the third country programme. To assure that Government and executing agency project proposals would be appropriate for helping to achieve the objectives of Romania's Five Year Development Plan.

Note: In accordance with decision 81/15, adopted by the Governing Council on 27 June 1981 (E/1981/61/Rev.1, Annex I), the third country programme for Romania is being submitted to the Council without an accompanying note by the Administrator. The previous country programmes for Romania and the accompanying notes by the Administrator were issued under the document symbols DP/GC/ROM/R.1-DP/GC/ROM/R.2 and DP/GC/ROM/R.1/RECOMMENDATION-DP/GC/ROM/R.2/RECOMMENDATION, respectively.
(1981-1985), all project proposals were reviewed and discussed in committee meetings involving the Ministry of Foreign Affairs, the State Committee for Planning, the State Council for Science and Technology and the Ministry of Finance. As a result of the meetings, project proposals were selected for inclusion in the third country programme.

3. The third country programme covers the five-year period from January 1982 to December 1986 and foresees total Government inputs of approximately 3,200 million lei (L) (US$290,900,000).

4. The UNDP Governing Council at its twenty-seventh session established an illustrative indicative planning figure (IPF) of US$7.5 million for Romania. Eighty per cent, or a total of US$6.0 million, is taken into account for programming. In addition, there remains a carry-over of about US$300,000 from the second country programme (1977-1981). These funds will be utilized to conclude activities in ongoing projects during 1982, it being understood that total budgets in 1982, including the carry-over, cannot exceed the authorized budget levels for that year.

5. Five Phase II projects make up some 22 per cent of the third country programme. The Phase II projects follow-up on activities that have proved successful and are thus considered warranted. More than 50 per cent of UNDP contribution is expected to be for equipment, which is to be provided primarily for research institutions in the form of technical and scientific instruments. The UNDP contribution to a project represents, in any case, the smaller part of any project's costs.

UNDP TECHNICAL CO-OPERATION ENVISAGED IN SUPPORT OF NATIONAL DEVELOPMENT PRIORITIES

6. The third country programme derives its nature and content from the priorities of the Five Year Development Plan of Romania for the 1981-1985 period and from the long-term objectives and programmes for the country's economic and social development up to the end of the twentieth century, as set by the Romanian Communist Party. The general aim of this plan is the achievement of a new quality of work and life through an extensive application of science and technology to production.

7. The Five Year Development Plan highlights problems that Romania anticipates and also some directions in which the policies are intended to take the economy: expansion of the raw materials base; increased coverage of the needs of the national economy by home resources and a substantial reduction of imports; the carrying out of a far-reaching agrarian revolution comprising the technical and material base, and the organization of production; increase of the energy base with the emphases, inter alia, on building nuclear power plants, using new energy sources, and reducing consumption of oil, gas and all kinds of fuels and electric energy; continuous growth of the welfare of the entire people and the creation of a new quality of life.

8. UNDP assistance is small in comparison to national means provided by the Government for social and economic development. However, UNDP plays an incentive part in the acceleration and optimization of solutions to many sectoral problems in areas of the economy where it is especially important to link national development trends with the achievements of world-wide technical knowledge.

9. As regards sectors in which assistance is being sought, the third country programme supports the main priority areas of the national plan by concentrating on the sectors of energy and natural resources, transportation and communications and industry.

10. The experience of the previous two country programmes has proved that its features, such as the utilization of highly qualified short-term consultants instead of resident experts and the training of Romanian specialists through short-term courses in institutions in other countries, are still some of the best means of utilizing the limited UNDP resources that are available in the IPF for Romania. This experience will continue in the third country programme.

A. Energy and natural resources

11. Rapidly growing needs for energy for the Romanian economy require an efficient utilization of existing natural resources and the finding of new sources of energy. Due to the importance that this sector has in the Romanian economy, a large portion of UNDP assistance has been earmarked for this purpose.

Research and Utilization of Geothermal Resources (Phase II)

12. Under the first phase project (ROM/76/O08), several installations were completed for utilization of the geothermal springs located in 14 zones of Romania. The already evaluated energy potential of geothermal waters is equivalent to one million tons of standard fuel. Continued UNDP assistance is requested to support Government efforts for the optimal use of deposits and the mastering of modern techniques (utilization of heat-dry rocks, electrical power utilizing freone and isobutane, maintaining deposit energy) and to expand the knowledge of specialized personnel. Estimated UNDP contribution: US$150,000.

Assistance for Nuclear Power Stations (NPS) (ROM/82/001)

13. The national programme for building nuclear power stations foresees reaching an installed electric power of 660 megawatts (MW) in 1985, 3960 MW in 1990 and of about 10,000 MW in the year 2000. The first NPS unit is now under construction, with an important participation of Romanian industry. UNDP assistance is requested to support the Institute for Nuclear Power Reactors to qualify the PHE-type fuel elements manufactured according to the technology already established by the Institute, as well as to approach other new activities such as testing of non-fuel nuclear materials and radioactive waste management. Estimated UNDP contribution: US$700,000.

Development of Black Sea Off-Shore Drilling (Phase II)

14. Under the first phase project (ROM/78/001), UNDP assisted the Government in training specialized personnel in the field of offshore drilling. Additional assistance is requested in order to determine the perimeters of the reserves,
establish specific technologies for extraction by means of offshore platforms and improvements of methods for drilling with major deviations (about 65°). Estimated UNDP contribution: US$500,000.

Improvement of Crude Oil and Gas Ores Extraction

15. The national programme of increasing the final recovery factor (inland drilling) provides for the intense application of conventional methods for recovery growth, mainly through water injection, as well as the implementation at industrial scale of modern extraction technologies. UNDP assistance is sought to support Government objectives related to the research and study of thermal methods and chemical processes in extraction activities as well as environmental protection. Estimated UNDP contribution: US$150,000.

Assistance for Development of Solar Energy Applications

16. According to the provisions of the long-term energy research and development national programme, special attention has been paid to new energy sources; in this respect a multi-energy model of economic growth has been adopted. The average level of sunshine in Romania offers good conditions for the construction of solar energy conversion systems, which could ensure considerable annual savings of primary energy resources.

17. The goal of the UNDP technical assistance in this area is to support the Research Institute for the Electrotechnical Industry (Bucharest) as general coordinator in developing technologies and applications in the fields of solar energy conversion towards the development of specific technologies for manufacturing photovoltaic modules and the conception and construction of an electric supply system, based on solar energy, to be used in the field of irrigation. Estimated UNDP contribution: US$400,000.

Development of the Coal Industry

18. The extractive industry in Romania, in particular the coal mines in the Jiu Valley, are characterized by a high level of mechanization and a variety of information that has to be gathered on a large area from each mine. Given the ever-growing importance of energy and coking coal production, the efficient control of the extraction can only be done by means of modern computer technique.

19. Consequently, it is proposed that a new project be included in the country programme that will allow the design and achievement of complex computerized information systems meant to manage and control design and production activities in the extracting industry. UNDP assistance will enable the Research Institute for Computers in Bucharest and the Mining Data Processing Centre in Petrosani to establish a complex system that will help design, implement and develop applicative programmes in the coal mining industry. Estimated UNDP contribution: US$550,000.

B. Transportation and telecommunications

20. The most urgent tasks in this sector concern the improvement of the telecommunications services and of the urban transport network as well as the implementation of modern methods for the maintenance of public roads.
Improvement of Telecommunications Services (Phase II)

21. The first phase project (ROM/79/001) provided for the training of specialized personnel and the procurement of small equipment to improve the automation and computerization of the telecommunications system. These initiatives have been found to be effective, and the Government wishes to pursue the training with a view to obtaining and maintaining high quality and efficiency in a nation-wide automatic interrelated system of telecommunications. Estimated UNDP contribution: US$100,000.

Subway Construction (Phase II)

22. The first subway section in Bucharest (8.1 kilometres (km)) went into operation in 1979. Under the first phase project (ROM/76/004), UNDP assisted the Government in soils investigation and training in tunnel boring, traffic automation and train operators. Additional assistance is now required for further research and development related to the construction of a second section (9.2 km). The Government intends to use the expertise gained to promote the exchange of technical information with developing countries. Estimated UNDP contribution: US$200,000.

Modern Methods for Road Maintenance

23. Under the second country programme, UNDP assisted the Government in a training scheme for specialists in highway construction as part of the national long-term plan for developing road transportation. As a corollary activity, assistance is requested in the third country programme in setting up an experimental work station which will systematize the organization and management of road maintenance. The results of this experiment are expected to lead to a network of such work stations. Estimated UNDP contribution: US$300,000.

Bucharest Public Transportation Services

24. The growing volume and complexity of intra-city public transportation (trams, trolleybuses and buses) has led to a need for a sophisticated data collection system able to process all information on public vehicle movements. Advisory services and equipment are requested from UNDP for the design, construction and operation of such a system. Estimated UNDP contribution: US$300,000.

C. Industry

25. At the present stage, the broadening use and proper management of national raw materials is a fundamental condition for the further development of Romanian industry and for the general progress of the society. The food and chemical industries have been selected for UNDP assistance.

Raw Materials for the Food Industry

26. In the context of raising the living standards of the population, the National Council for Science and Technology advanced the programme "PROTEINS" that is carried out by the Food Chemistry Institute in Bucharest. An important objective is the production in the country of protein vegetal concentrates and isolates (soybeans, sunflower, peas, etc.) and their utilization as additives to meat products, bread, confectionery, soft drinks and baby food products. The achievement of these objectives implies mastering the modern technologies that are expected to be obtained
with UNDP support. Estimated UNDP contribution: US$400,000.

**Raw Materials from Non-conventional Sources for the Chemical Industry**

27. It is envisaged that the chemical industry in Romania will be developed by means of indigenous technologies characterized by low energy consumption. Special attention is being paid to the step-by-step replacement of imported raw materials, first of all the oil hydrocarbons, by non-conventional sources of raw materials (such as biomass, coal and natural gas).

28. In support of the Institute of Chemical and Biological Energetics, within the Central Institute of Chemistry, Bucharest, UNDP is requested to assist in completing a biomass pilot plant and a pilot plant for methanol pyrolysis, within which technologies will be tried and established for converting natural raw materials into industrially viable products. Estimated UNDP contribution: US$1,000,000.

**D. Science and technology**

29. The Long-Term National Programme for Scientific Research, Technological Development and Application of Technical Progress defines the main directions and priority areas that have to be approached by Romanian institutions in the field of science and technology until the year 2000. From among its priority areas of investigation, the Government has selected the applications of microwave techniques as an area for assistance from UNDP.

**Microwave Technologies for Communications, Remote Sensing, Navigation and Meteorology**

30. With the view of satisfying the requirements of the national economy as regards the applications of microwave techniques, the Government intends to establish a research and experimental facility which would allow the development in Romania of the production of equipment and components in the field of microwave applications. The UNDP contribution would partially support the achievement of this objective, permitting the purchase of technological equipment and specific instrumentation as well as short-term consultants and the training of Romanian personnel in research centres abroad. Estimated UNDP contribution: US$300,000.

**E. Housing**

**Building Construction in Earthquake Areas (Phase II)**

31. The earthquake that occurred in Romania on 4 March, 1977 emphasized the necessity of developing research in the field of seismic engineering. The results obtained so far, assisted by UNDP (ROM/76/026), paved the way for strengthening efforts to improve calculation methods for building construction areas, design methodology for earthquake areas and construction safety against seismic shocks.

32. The second phase of the UNDP assistance, between 1982-1986, will allow the Research Institute for Building and Building Economy in Bucharest and the Jassy branch of the Central Institute for Research, Design and Guideline in Building to equip their specialized laboratory with modern instrumentation for recording strong seismic movements, for dynamic tests on buildings and dynamic tests of the earth strata and for data processing. The assistance will also provide for training for
Romanian personnel abroad. Estimated UNDP contribution: US$350,000.

F. Other

33. An amount of US$300,000 is being earmarked for Romanian participation in as yet unspecified activities in technical co-operation among developing countries (TCDC) as well as for the purchase of needed spare parts.
Annex

FINANCIAL SUMMARY

A. Resources

(a) IPF and other resources

(i) Illustrative IPF for programme period 7 500 000
(ii) Carry-over from previous IPF cycles 300 000
(iii) Other resources -

(b) Provision for adequate programming -

TOTAL 7 800 000

B. Use of resources

(a) Programmed

(i) Ongoing projects 254 400
(ii) New projects and new phases included in the country programme 5 400 000
(iii) Earmarked for specific objectives and activities for which projects are to be worked out (continuous programming at a later stage) 300 000

Subtotal 5 954 400

(b) Reserve 345 600

(c) Unprogrammed balance a/

1 500 000

TOTAL 7 800 000

C. Financial distribution of programme, by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Ongoing projects $</th>
<th>New projects $</th>
<th>Sectoral earmarkings $</th>
<th>TOTAL $</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 Natural resources</td>
<td>45 000</td>
<td>2 450 000</td>
<td></td>
<td>2 495 000</td>
</tr>
<tr>
<td>04 Agriculture, forestry and fisheries</td>
<td>9 150</td>
<td></td>
<td></td>
<td>9 150</td>
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<tr>
<td>05 Industry</td>
<td>34 100</td>
<td>1 400 000</td>
<td></td>
<td>1 434 100</td>
</tr>
<tr>
<td>06 Transport and communication</td>
<td>60 000</td>
<td>900 000</td>
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<td>960 000</td>
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<tr>
<td>07 International trade and development finance</td>
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<td></td>
<td></td>
<td>10 000</td>
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<tr>
<td>09 Human settlements</td>
<td>10 800</td>
<td>350 000</td>
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<td>360 800</td>
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<tr>
<td>10 Health</td>
<td>30 450</td>
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<td>30 450</td>
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<tr>
<td>11 Education</td>
<td>25 000</td>
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<td>25 000</td>
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<tr>
<td>12 Social conditions and equity</td>
<td>29 900</td>
<td></td>
<td></td>
<td>29 900</td>
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<tr>
<td>16 Science and technology</td>
<td></td>
<td>300 000</td>
<td></td>
<td>300 000</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td>300 000</td>
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<td>GRAND TOTAL</td>
<td>254 400</td>
<td>5 400 000</td>
<td>300 000</td>
<td>5 954 400</td>
</tr>
</tbody>
</table>

a/ Representing 20 per cent of the illustrative IPF which has not been taken into account for programming in accordance with the Administrator's instructions contained in UNDP/PROG/FIELD/111; UNDP/PROG/HQTRS/126.

b/ According to ACC classification.