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PROGRAMME PLANNING

Country and intercountry programmes and projects

SECOND COUNTRY PROGRAMME FOR THE DEMOCRATIC  
PEOPLE'S REPUBLIC OF KOREA\*

| <u>Programme period</u>    | <u>Actual resources programmed</u> | <u>\$</u>        |
|----------------------------|------------------------------------|------------------|
| January 1987-December 1991 | IPF for 1987-1991                  | 13 612 000       |
|                            | Third cycle balance                | <u>1 532 000</u> |
|                            | Total                              | 15 144 000       |

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\* Detailed listings of projects and other related data prepared as part of the country programming exercise are available on request. These listings include: (a) ongoing projects; (b) proposed projects; (c) project pipeline; (d) distribution of resources by objective; (e) planned activities of operational funds and programmes under the authority of the Administrator.

## I. NATIONAL DEVELOPMENT TRENDS, STRATEGIES AND PRIORITIES

### A. Current economic trends

1. The Democratic People's Republic of Korea is a rapidly developing country, which has achieved significant economic growth during recent years on the basis of its policy of self-reliance ("Juche"). During the period of its Second Seven-Year Plan (1978-1984), the value of gross industrial output increased 2.2 times and the average annual industrial growth rate reached 12.2 per cent. Stable agricultural development has also been achieved through intensive farming methods and extensive water conservation systems. Great strides have also been made in the field of education and public health. In addition to the provision of universal 11-year free and compulsory schooling, the number of universities and other institutions of higher learning has increased significantly during the plan period. The number of medical doctors increased 1.4 times and hospital beds by 106 per cent. The standard of living of the people improved overall as the national income grew 1.8 times between 1977 and 1984. These positive trends are expected to continue during the next Seven-Year Plan period (1987-1993).

2. Despite the remarkable economic progress achieved so far, the Democratic People's Republic of Korea still faces the challenge of modernizing its industrial and agricultural sectors to ensure sustained economic growth and social development. Being an oil-importing country, it needs to strengthen and diversify its energy development programmes in order to minimize its dependence on foreign sources of energy. As mountains and forests account for nearly 80 per cent of its territory, the country has little alternative but to expand its arable land area through tidal-land reclamation and increase the per unit production of its land through the introduction of modern farming technology.

3. Although the country is largely self-reliant for its own economic development, the Government has increasingly engaged in technical and economic co-operation with other countries on the basis of equality and mutual benefit. It has also developed and expanded its co-operation with the United Nations development system during the past few years and reconfirms its readiness to continue this co-operation in the future as it progresses towards the achievement of its national development goals.

### B. National development strategies

4. The overall objective of the Democratic People's Republic of Korea's national development strategy can be summarized as follows: "While giving priority to the development of heavy industry, develop light industry and agriculture at the same time".

5. The Government has set forth the following main objectives for its Third Seven-Year Plan (1987-1993), even though the Plan has not yet been officially released:

(a) A strengthening of the basis for the development of an independent national economy;

- (b) Improvement in the standard of living of the entire population; and
- (c) Acceleration of the process of technological change on a wider scale.

6. The main targets and priorities in the major economic sectors are as follows:

#### Industry

- (i) Accord highest priority to the development of the mining industry and the power-generating industry. In this connection, two major targets have been set for the end of the 1980s - production of 120 million tons of coal annually and 100 billion kilowatt/hours of electricity annually;
- (ii) Develop the metallurgical industry to attain the goal of producing 15 million tons of steel annually and 1.5 million tons of non-ferrous metal products annually by the end of the 1980s;
- (iii) Strengthen the machine-building industry, especially to produce large, high-speed automatic machine tools;
- (iv) Develop the chemical industry with emphasis on the production of chemical fertilizers and chemical fabrics. The annual production goals to be reached for these two products by the end of the 1980s are 7 million and 20 million tons respectively;
- (v) Strengthen the building materials industry with emphasis on cement production. An annual production target of 20 million tons of cement has been set for the end of the 1980s.

#### Agriculture

- (i) Continue to increase food production to achieve the goal of 15 million tons of grain annually by the end of the 1980s. It is particularly important to increase the per hectare production of rice and maize, raising yields from 7.6 tons and 6.5 tons, respectively, to 9 tons per hectare;
- (ii) Expand arable land to reach the late 1980s target of increasing cultivable land by 300,000 hectares through tideland reclamation. It may be possible to add a further 200,000 hectares through other means;
- (iii) Introduce modern scientific methods of soil and plant analysis and land measuring systems;
- (iv) Develop new varieties of vegetables and fruit and increase their production;
- (v) Improve the breeding of livestock and accelerate animal production.

Living standards

- (i) Improve the quality of the people's diet by diversifying food-processing industries. It is particularly important to increase fish production to attain the national target of 5 million tons of fish annually by the end of the 1980s, to develop fresh water and shallow sea farming and to introduce modern fish-processing technologies;
- (ii) Improve the provision of public health and education, laying emphasis on the prevention of disease, the modernization of medical apparatus, the expansion of "after school" education facilities and the raising of educational standards for schools of higher learning;
- (iii) Improve housing conditions, emphasizing better town planning and management, as well as environmental control;
- (iv) Expand the production and improve the quality of consumer goods (e.g. the annual production of 1,500 million metres of fabric has been set as a target for the end of the 1980s).

C. Technical co-operation priorities

7. In accordance with its national strategy for development as outlined above, the Government's priorities for technical co-operation aim at "solving successfully the scientific and technical problems in achieving the ten long-term targets of socialist economic construction". In particular, this co-operation is aimed at:

(a) Accelerating the development of mechanical engineering, electronics and automation industries;

(b) Introducing advanced technology for the effective utilization of domestic raw materials, especially energy materials; and

(c) Putting production and management activities on an improved, scientific basis.

8. The Democratic People's Republic of Korea's bilateral agreements with other countries, including the Union of Soviet Socialist Republics and China, provide for the bulk of its technical assistance needs. Multilateral co-operation with the United Nations system and UNDP in particular will continue to play an important complementary role. UNDP is and will continue to be the major source of multilateral technical co-operation with the Democratic People's Republic of Korea for the next five years, providing, as it does, over 50 per cent of total multilateral technical assistance.

9. In view of the limited financial resources available from UNDP, compared with the Government's sizeable technical assistance needs, agreement has been reached with the UNDP Resident Representative to concentrate UNDP programme resources on specific activities in three main sectors - industry, agriculture and export

promotion - all three commensurate with the overall priorities set by the Government for technical co-operation. To identify precise areas for technical co-operation within these priority sectors, programming missions were mounted by the United Nations Industrial Development Organization (UNIDO) and the Food and Agriculture Organization of the United Nations (FAO) as part of the country programming process.

10. After due consultations with sectoral government ministries and technical institutions concerned, the UNIDO mission concluded that "the technical assistance needs of the Government related to industrial development are all relevant in terms of their development objectives, addressing critical problems which, if successfully resolved, will significantly contribute to the country's overall development". The FAO mission, in the same vein, held that the implementation of the Government's requests in the agricultural sector will help bring about a well-balanced nutritional diet for the country's population and thus enhance national welfare.

#### D. Aid co-ordination arrangements

11. The UNDP Resident Representative in Pyongyang is the sole representative of the United Nations development system in the Democratic People's Republic of Korea. In addition to his central role of managing the IPF-funded programme of technical assistance, he is responsible for co-ordinating and monitoring the programmes of, inter alia, the United Nations Children's Fund (UNICEF), the United Nations Fund for Population Activities (UNFPA) as well as the regular programmes of various United Nations agencies, as for instance the programmes of the World Health Organization (WHO), UNIDO, FAO and the International Atomic Energy Agency (IAEA). This responsibility for the monitoring and co-ordination of non-IPF funded activities has facilitated the co-ordination of multilateral technical co-operation in the country.

12. In May 1986 the Government took an important decision to expand the scope of activities and responsibility of the Ministry of Foreign Trade (MFT). Until that time, the Third Department of MFT was responsible only for the UNDP/IPF-funded programme. From May 1986, the Fifth Department of MFT was designated with immediate effect as the Government's central co-ordinating agency for all multilateral technical co-operation. Consequently, in addition to the co-ordination of UNDP assistance, all activities of other agencies and organizations of the United Nations development system are now covered under the umbrella of the Fifth Department of the MFT with the exception of United Nations Educational, Scientific and Cultural Organization (UNESCO), for which the Ministry of Foreign Affairs is responsible for policy formulation, while the Fifth Department handles project execution. This decision has facilitated the overall co-ordination of United Nations technical co-operation in the country, and helps to strengthen the central co-ordinating role of the UNDP Resident Representative by making the MFT and the Resident Representative jointly responsible for identifying and agreeing upon the multilateral technical co-operation needs of the country. It also facilitates joint discussions with missions from United Nations agencies and the formulation of both IPF and non-IPF-funded United Nations technical co-operation programmes and projects.

## II. THE COUNTRY PROGRAMME

A. Assessment of the current country programme

13. UNDP's technical co-operation with the Democratic People's Republic of Korea was initiated in 1979, after the signing of the Standard Basic Agreement in November that year, at which time a special IPF allocation of \$8,850,000 was made covering the remaining period of the second IPF cycle. Consequently, the assessment of the first country programme for the Democratic People's Republic of Korea has been based on an evaluation of project activities initiated from 1979 onwards, which laid the foundation for the preparation and implementation of its first country programme (1982-1986).

14. During the first country programme period, UNDP assistance was provided in several major sectors of the economy, distributed as follows: 37.6 per cent for industry, 25.8 per cent for transport and communication, 13.1 per cent for science and technology, 11.3 per cent for agriculture and 8.8 per cent for education (see table in para. 16).

15. The actual distribution of IPF resources by sector as stated above is somewhat different from the sectoral allocations made in the country programme document as approved by the Governing Council. Additionally, 7 of the 20 planned projects did not materialize as a direct result of the global cutback of IPF resources at the beginning of the 1982-1986 IPF cycle, reducing the IPF for the country from \$24.750 million to \$13.610 million. Subsequently, however, 4 new projects which had not previously been included in the country programme were approved. These were: Trade Information Service (\$112,800), Pilot Goat Farm (\$100,000), Transfer of Knowledge through Expatriate Nationals (TOKTEN) (\$100,000) and Tidal Land Reclamation (\$386,000). These 4 projects were requested by the Government and project documents formulated through consultations with the agencies concerned (FAO, the International Trade Centre (ITC)). Though small in scale, the approval of these projects helped to diversify the programme and opened the door to some new dimensions in technical assistance to the Democratic People's Republic of Korea, TOKTEN, being one example.

16. As a result of the elimination of seven project concepts from the programme and the addition of four new projects, a comparison of the originally conceived country programme with the actual operational programme can, from the point of view of IPF distribution sector by sector, be summarized as follows:

| <u>Sector</u>                    | <u>Planned original programme</u> |                          | <u>Actually implemented programme</u> |                          |
|----------------------------------|-----------------------------------|--------------------------|---------------------------------------|--------------------------|
|                                  | <u>Allocation (\$ 000)</u>        | <u>Per cent of total</u> | <u>Allocation (\$ 000)</u>            | <u>Per cent of total</u> |
| Industry                         | 6 011                             | 35.6                     | 6 003                                 | 37.6                     |
| Science and technology           | 4 065                             | 24.0                     | 2 101                                 | 13.1                     |
| Transport and communication      | 1 581                             | 9.4                      | 4 128                                 | 25.8                     |
| Agriculture, forestry, fisheries | 2 000                             | 11.8                     | 1 802                                 | 11.3                     |
| Natural resources                | 1 500                             | 8.9                      | -                                     | -                        |
| Education                        | 1 133                             | 6.7                      | 1 404                                 | 8.8                      |
| Health                           | 480                               | 2.8                      | 312                                   | 2.0                      |
| Development policy and planning  | 129                               | 0.8                      | 108                                   | 0.7                      |
| International trade              | 0                                 | 0                        | 114                                   | 0.7                      |
| <b>Total</b>                     | <b>16 889</b>                     | <b>100.0</b>             | <b>15 972</b>                         | <b>100.0</b>             |

17. Although this was the first country programme of UNDP technical co-operation implemented in the Democratic People's Republic of Korea, the impact of the programme has been assessed as significant. Three projects in the transport sector, which accounted for one fourth of the IPF resource allocation, have contributed to technological advancement in several key areas of the country's transportation network, viz. Development of Port Facilities (DRK/79/001). The final evaluation meeting for this project concluded that it had achieved its defined objective in establishing pilot mechanized facilities for the loading of bagged and bulk cement. Facilities such as these are being replicated elsewhere in the country, resulting in the improvement and modernization of port facilities. Also, Reinforcement of Selected Civil Aviation Facilities and Services (DRK/81/004) has succeeded in establishing the country's first air traffic control training facility and the improvement of the air traffic communications system at the Pyongyang International Airport and other domestic as well as regional airports. Furthermore, Railway Automation (DRK/80/001) is expected to achieve its basic objective of introducing a computer-based central traffic control system in one section of the railways network as a model for the further automatization of the national railway system. The projects in the industrial sector, although problematic, represent serious attempts for the first time in the country's history to introduce sophisticated technology in certain areas such as the production of integrated circuits and numerically-controlled machine tools. These modest beginnings have laid the basis for future developments in these important areas. Strengthening of Language Training at the Pyongyang University for Foreign

Studies (DRK/81/001) has helped to train a group of key language teaching staff in English and French and to revise the education curricula and methods with emphasis on translation and interpretation. Given the fact that a lack of foreign language capability is one of the major constraints to more meaningful technical exchanges with other countries, the project is expected to have far-reaching significance for the Democratic People's Republic of Korea.

18. However, problems have been experienced in the implementation of some projects, especially large projects which involve the transfer of sophisticated technology. In retrospect, these problems have resulted from over-ambitious objectives conceived at project design stage without adequate consideration of the availability of local skills, the possibilities of securing foreign technology in a timely manner and the likelihood of encountering financial constraints. Consequently, the implementation of some projects was seriously delayed because of difficulties in the procurement of essential equipment for lack of export licences. Also, the difficulty of placing Korean fellows in some countries has engendered undue delays. Moreover, the Government recognizes that line ministries have also experienced difficulties in providing buildings and services at required standards and in nominating candidates for studies abroad with acceptable foreign language proficiency. As a consequence, one of the largest IPF-funded projects (Establishment of a Pilot Plant and Training Centre for Bipolar Digital Integrated Circuits DRK/79/003), had to be redesigned in order to bring its objectives in line with what was realistically achievable in both technological and financial terms.

19. On the basis of the experience gained during the implementation of the first country programme in conjunction with UNDP, the Government has become more cautious in examining the feasibility of proposed new projects, taking into account the capabilities of implementing agencies, the possibility of securing equipment and technology from abroad and of providing adequate domestic inputs. As a result, projects necessitating the use of sophisticated technology, such as optical fibre and biotechnology were eliminated at an early stage of the country programming process. Furthermore, in the case of some complex large-scale projects the mechanism of preparatory assistance will be applied to ensure satisfactory project design from the outset. As the Government has only gradually come to realize the scope and limits of UNDP's mandate for technical co-operation, it has also recognized that an appropriate balance between equipment and other components of UNDP-assisted projects should be maintained. It is anticipated that commitments for equipment will not exceed 50 per cent of total commitments during the new country programme.

#### B. New programme proposal

20. The implementation of the second country programme of the Democratic People's Republic of Korea/UNDP technical co-operation covering the period 1987-1991 will largely coincide with the country's Third Seven-Year Plan (1987-1993). The IPF allocation for the Democratic People's Republic of Korea in the fourth cycle is \$13,612 million. The carry-over of unutilized IPF funds from the previous cycle is estimated to be \$1.532 million. Thus, total UNDP resources available for the period 1987-1991 are estimated at \$15,144 million. No other financial resources are available for inclusion in the framework of the country programme.



21. In order to make the most effective use of limited IPF availabilities and to maximize the benefits provided through UNDP technical assistance, the Government intends to explore fully the possibility of utilizing cost-effective technical expertise expected to be provided through the mechanisms of TOKTEN, Short-term Advisory Services (STAS) and United Nations Volunteers (UNV). According to the adopted policy of the Government of the Democratic People's Republic of Korea of strengthening South-South co-operation, greater emphasis will also be given to participation in activities of technical co-operation among developing countries (TCDC).

22. As a consequence of the lessons learned through the implementation of the first country programme, the second country programme will focus on a few carefully selected development objectives in line with the national development strategy and the present level of economic development of the country, as well as appropriate levels of technology needed to achieve proposed objectives. In brief, the level of technology in projects to be formulated would be carefully tailored to match the country's absorptive capacity and the United Nations system's capacity to deliver such technology. Through the adoption of such a strategy, it is expected that the objectives set for the new country programme will be attainable. The three major development objectives identified for the new country programme are discussed in the following paragraphs. They are all subsumed under a common goal of improving the standard of living of the people of the Democratic People's Republic of Korea.

#### Increased agricultural productivity

23. The Government of the Democratic People's Republic of Korea has given highest priority to the objective of increasing the present level of cereal production from about 10 million tons annually to 15 million tons annually by the end of the 1980s. The Democratic People's Republic of Korea is a mountainous country; over three fourths of its land area is covered by hills, mountains and forests. Arable land available for grain cultivation is limited to a mere 1.6 million hectares. In order to achieve the national target for grain production, it is essential to increase significantly the yields per hectare of the main cereal crops - rice and maize - by introducing and developing high-yielding varieties of seed. In this connection, UNDP assistance is particularly relevant because of the experience the United Nations system has had in helping to improve crop productivity under a variety of agro-ecological conditions in a number of countries throughout the developing world. In the first country programme UNDP assisted in the funding of two agriculture projects:

(a) The maize breeding improvement project (DRK/85/001), which has achieved its initial objective of introducing new genetic materials and establishing a modern maize breeding research and extension programme; and

(b) The seed processing project (DRK/82/002), which aims at the introduction of improved methods of seed processing, artificial drying and controlled environmental storage.

24. In view of the importance of the introduction of high-yielding varieties of seed, the current assistance in the areas of maize breeding and seed processing is

expected to extend into the fourth cycle. In addition, a new project is proposed to improve rice varieties through the introduction of improved seed processing systems capable of withstanding cold weather, temperature variation, pests and diseases. The results of research conducted in this area will be propagated as appropriate throughout the country after their adaptability has been proven.

25. In order to achieve higher per unit yields, it is necessary to give greater emphasis to the selection of appropriate types of fertilizers and pesticides/herbicides and to a better use of available irrigation supplies for which scientific soil and plant analysis is necessary. Consequently, a project proposal will be included in the new country programme to introduce modern technology in soil and plant analysis.

26. The Government is engaged in an ambitious programme aimed at reclaiming 300,000 hectares of tidal land, which will entail the construction of some 1,000 kilometres of sea dykes in order to extend the limited arable land area of the country available for agricultural production. This exercise will require the application of improved pre-design investigation, particularly pertaining to the construction of dykes, in order to achieve safety and stability under severe weather conditions. To this end, a UNDP-assisted project was approved in 1986 which aims at improving the technique of dyke building and the agricultural development of reclaimed sea land through co-operation in the design of a "model" dyke and a model polder area of about 9,000 hectares near Taegye in the North Pyongan province. The initial activities leading to the development of the aforementioned projects were supported by the Technical Co-operation Programme of FAO (FAO/TCP) and, wherever feasible, TCP projects should continue to act as forerunners to UNDP-funded projects. Since 1980, some 15 TCP projects have been implemented in the country.

27. In the context of national economic development, the Government gives high priority to the steady improvement of the material and cultural standards of its people and considers this to be the "supreme principle determining all activities of the State". UNDP assistance will be sought in support of this objective through specific projects directed towards the improvement of the nutritional intake of the people through the diversification of their daily diet.

28. In this connection, it should be noted that in spite of the improved diet of the population in past years, the average animal protein consumption of the population is still low, given the country's rate of socio-economic development, and is incompatible with the Government's objective of improving the living standards of its people. One important means of raising the animal protein intake and achieving a balanced diet is increasing the level of consumption of fish through improved fish catches and modernization of fish-processing technology. The country's fishing operations are concentrated on one predominant species of fish (Alaska pollack), which is harvested in a very short fishing season of three months a year. With a view to bringing about an enlarged fish-processing capacity and improved processing technology, a new project is under preparation for UNDP assistance; its objective is setting up a fish-processing technological laboratory for applied research aimed at resolving problems of fish handling and developing new fish products through appropriate technology.

29. Another important means of increasing the animal protein intake in the national diet is improving livestock production. Given the large mountainous areas of the country, there is good potential for the development of animal husbandry. However, the livestock management skills currently practised are traditional; minimal attention is given to stock improvement. Because of the poor genetic stock of local breeds, the productive capacity of herds is low. In view of this, a project was approved in 1986 to establish a pilot Goat Farm (DRK/85/003) to improve the production of goat milk, meat and cashmere wool by cross breeding domestic breeds with imported breeds, coupled with the introduction of improved management techniques. To intensify efforts in this area under the second country programme, UNDP assistance will be sought to initiate a new project for stock farming modernization to enhance the meat and dairy production of cattle through the inclusion of improved breeds, better feeding and modern health monitoring methods.

30. The per capita vegetable consumption for the country as a whole is high - in the region of 900 grams per day. Nevertheless, the varieties of vegetables available are few and the harvest season short. This has resulted in a traditional reliance on salted pickles for a rather long period of time each year, especially during the winter months. To address this problem, the Government is making every effort to introduce new varieties of vegetables in order to reduce the present heavy reliance on pickled vegetables. In this connection, UNDP technical co-operation is being requested to introduce and test new vegetable seeds, vegetable growing techniques (e.g. tissue culture), post-harvest technologies such as handling, packing, storage and transportation. UNDP assistance will link up with and reinforce the assistance being provided under an ongoing regional project - Regional Vegetable Research and Extension (RAS/86/003). A similar project to increase fruit production through the introduction of high-yielding rootstock and research on cultivation, preservation and storage is also proposed.

#### Improved efficiency and quality of industrial production

31. Through gigantic efforts by the Korean people in carrying out the tasks involved in achieving a technological revolution based on the principle of self-reliance, the country has established a broad-based industrial production infrastructure in only a few decades. However, further development of basic industrial subsectors is being constrained because of the growing need for access to advanced technologies, available only from abroad, in a number of important areas. The introduction of advanced technologies in the Democratic People's Republic of Korea is essential for achieving improved productivity and product quality. UNDP has demonstrated its ability in assisting developing countries to adopt and adapt such advanced technologies. In the Democratic People's Republic of Korea, UNDP assistance has evolved in a number of crucial areas in the ongoing technological revolution, such as integrated circuits, numerically-controlled machine tools and metrology.

32. To further the country's industrial development, the Government has given highest priority to electric power generation and is making good progress in tapping of its rich water and coal resources for the provision of additional power supplies. However, the reliability of the electrical supply to industry still leaves much to be desired, as voltage fluctuations are sometimes excessive and

power failures occur frequently. The root of the problem lies in the instability of the electrical power distribution system. In order to come to grips with this vital problem, two new projects are proposed: Firstly, to establish Central Testing Facilities at the October 5th Electricity Factory in Pyongyang for carrying out testing and advisory services required for electric power distribution system components such as high-capacity fuses, circuit breakers and automatic switches. (It is believed that the capability to test these products is the key to improving their quality.) Secondly, to strengthen the capability of the Taean Heavy Machinery Factory in transformer production through the transfer of technology for the design, production and testing of transformers in sizes of 1,000 kilovolt amperes and larger to enable its production at a quality level comparable with transformers made in the more advanced industrial countries.

33. Developing the chemical industry with the emphasis on the production of synthetic materials is one of the country's industrial development priorities. Polyethylene is an important plastic used worldwide on a large scale. The basic raw material for its production is natural gas or petroleum, neither of which is indigenous to the Democratic People's Republic of Korea. But the technology exists to produce polyethylene (and other polyolefins) from coal through the synthesis gas-methanol-olefin and/or acetic acid route. To acquire these technologies, assistance is proposed for the Institute of Organic Chemistry in Hamhung, which is already carrying out laboratory-scale process development, to undertake synthesis gas-based methanol-olefin and/or acetic acid production at bench-scale level. The ongoing UNDP-assisted project, Catalyst Research and Development for Industrial Application (DRK/81/013) will provide necessary facilities for preparing the catalysts for these processes.

34. Chemical analytical instruments are going to be needed increasingly by industry, for research in health services and in educational institutions. However, most instruments are currently imported. Moreover, servicing of foreign-made instruments is usually not readily available. To ameliorate this situation, a new project is proposed for assisting the Institute of Experimental Instruments, which is currently making several types of chemical analytical instruments, to improve the quality of the instruments it produces and to acquire the technology for making two new instruments, namely, infrared spectrophotometers and gas chromatographs.

35. In addition to IPF-funded activities, UNIDO is engaged in technical co-operation with the Democratic People's Republic of Korea through its regular programme. Because coal is the only thermal energy source in the country, UNIDO has recently approved a project for improving the design of coal mining equipment used in swamp areas. A project entitled Dry-Quenching of Metallurgical Coal has also been proposed.

36. The Democratic People's Republic of Korea intends to participate in the UNDP-funded regional programme of technical co-operation to enhance its technical capabilities in a variety of areas, including mini-hydropower generators, sponge-iron development, cement production and low-cost building materials.

Increased export earnings

37. The Government is paying increasing attention to strengthening its foreign trade, diversifying trade distribution by countries and increasing its export capability based on indigenous natural resources. Exports are expected to multiply 4.2 times during the 1980s. To this end, an ITC mission which visited the Democratic People's Republic of Korea in 1984 concluded that one of the prerequisites to improved foreign trade is the establishment of a modern trade information service to provide, on a daily and regular basis, market-related information including trade statistics and commodity prices of interest to the country. Existing services lack modern information processing and retrieval systems and are not adequately equipped for the analyses and dissemination of information. In accordance with ITC's recommendations, a UNDP project supporting the Establishment of a Trade Information Service (DRK/85/002) was approved in 1985 to develop a local capability to provide accurate and up-to-date trade information to the Ministry of Foreign Trade and state trading organizations as well as to upgrade the technical and professional qualifications of national staff in such a service. The project proved successful at the initial stage and it was agreed to extend the project into the new programming cycle in order to consolidate and expand the achievements already made.

38. In promoting the export of products made from indigenous raw materials, the Government will pay due attention to product competitiveness and capitalize on its comparative advantages vis-à-vis its trading partners. A priority identified by the Government for export promotion is high quality packaging, which is indispensable to product promotion on international markets. Though the Democratic People's Republic of Korea is able to produce most packaging materials for its export products, both quality and variety are inadequate and not conducive to a competitive image. Therefore, technical assistance is needed to improve export quality packaging and packaging materials, as well as for human resource development in export packaging technology. In this area, the production of self-adhesive tape for sealing cartons and the technology of printing on aluminum foil are also listed as priorities for technical assistance.

39. In view of the country's rich forest resources - some 6 million cubic metres of wood are felled each year - there is great potential for exporting wood products. However, existing wood products are generally of low quality and processing technology is antiquated. Thus, UNDP assistance will be sought to establish a Wood Furniture Design, Prototype and Training Centre with the objective of improving the quality of wood furniture. Emphasis is to be placed on serial production of household furniture using modern knockdown technology for easy transport and export competitiveness.

40. On the international seafood market, aqua-products such as abalone, scallops, sea cucumber and other shellfish, with which the Democratic People's Republic of Korea is well-endowed, are considered to have high export potential. Wide experience has been gained in cultivating these aqua-products on the country's shallow sea coast. However, it is important to introduce modern technology and management skills to upgrade the capability and increase production to meet growing export demands. Consequently, a UNDP-assisted project is proposed to establish an

experimental shallow sea farm on the east coast at Kosong which could, as the Government proposes, serve as a regional centre for shallow sea farming development and demonstration within the framework of a new intercountry project (RAS/86/006) in this field.

#### Other technical co-operation needs

41. In order to maintain the existing high level of health care, the Government puts great emphasis on the provision of preventive health measures as the fundamental principle of its public health policy. With the country's rapid economic development, considerable impact on the environment is anticipated. A UNDP-assisted project on the Control of Environmental Health Hazards, DRK/81/009, is currently being implemented and expected to continue into the new programming cycle. The project is designed to strengthen the capability of the government agencies concerned to monitor the main sources of air and water pollution, as well as food contamination and other potential health hazards, and to establish procedures for controlling these hazards. The results of this project will prove useful not only to the Democratic People's Republic of Korea, but also to other developing countries as a contribution towards enhancing the benefits to mankind of the International Drinking Water Supply and Sanitation Decade (IDWSSD), as well as the International Programme on Chemical Safety (IPCS).

42. Also in line with the Government's public health policy, UNICEF and UNFPA are actively involved in the qualitative improvement of health care in the country. UNICEF co-operation is being concentrated in the area of child immunization, including production of vaccines and improvement of the cold chain, while UNFPA is providing assistance in support of maternal and child health and family planning (MCH/FP) services, the local production of intra-uterine devices (IUDs) and the strengthening of the Government's Population Centre. It is expected that the technical assistance provided through these agencies would pave the way for improving the quality of life of the people.

43. As indicated under paragraph 21 above, the Government has expressed a keen interest in making use of cost-effective technical expertise of the kind that can be made available through the mechanism of TOKTEN, among others. A Government-executed TOKTEN project was approved with UNDP assistance in 1986. It is envisaged that this project, if positively evaluated, will continue throughout the fourth IPF cycle under a second phase. Furthermore, an umbrella project, although limited in size, entitled Support of Programme Objectives, was also approved in 1986 to absorb the cost of a range of low-cost technical assistance needs, such as ad hoc study tours, participation of Korean nationals in workshops abroad, financing of project formulation missions, etc., all of which immediately require the provision of travel and other costs. The umbrella project would cover these needs where they are not met by other projects and would serve as an important vehicle for widening the country's exposure to the technical co-operation activities of the United Nations system.

C. Unprogrammed reserve

44. Since the next national Seven-Year Plan has not yet been published, unforeseen needs are likely to arise. Moreover, new ideas for future technical assistance are expected to emerge during the implementation of the second country programme. With this in view, it is proposed that the sum of \$1.5 million be set aside to meet any unforeseen demands for funding during the entire programming period.

Annex  
 FINANCIAL SUMMARY

I. ACTUAL RESOURCES TAKEN INTO ACCOUNT FOR PROGRAMMING

| <u>A. UNDP-administered sources</u>  | <u>\$</u>  | <u>\$</u>                    |
|--|------------|------------------------------|
| Third cycle IPF balance  | 1 532 000  |                              |
| Fourth cycle IPF   | 13 612 000 |                              |
| Subtotal IPF   |            | 15 144 000                   |
| Special Measures Fund for Least Developed Countries  | -          |                              |
| Special programme resources  | -          |                              |
| Government cost-sharing  | -          |                              |
| Third-party cost-sharing   | -          |                              |
| Operational funds under the authority of the Administrator   | -          |                              |
| UNDP special trust funds   | -          |                              |
| Subtotal, UNDP non-IPF funds   |            | -                            |
| <br><u>B. Other sources</u>  |            |                              |
| Funds from other United Nations agencies or organizations firmly committed as a result of the country programme exercise | -          |                              |
| Parallel financing from non-United Nations sources   | -          |                              |
| Subtotal, other sources  |            | -                            |
| <br>TOTAL ACTUAL RESOURCES TAKEN INTO ACCOUNT FOR PROGRAMMING  |            | <br><u><u>15 144 000</u></u> |

II. USE OF RESOURCES

|                                |           |                              |
|--------------------------------|-----------|------------------------------|
| Ongoing projects               | 3 269 000 |                              |
| New project proposals          | 9 000 000 |                              |
| Programmed reserve             | 1 375 000 |                              |
| Subtotal, programmed resources |           | 13 644 000                   |
| Unprogrammed reserve           |           | 1 500 000                    |
| <br>TOTAL USE OF RESOURCES     |           | <br><u><u>15 144 000</u></u> |

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