

DESA

BHUTAN, KINGDOM OF BHUTAN  
" UNDP MISSION TO BHUTAN - 17-31 MARCH 1973," BY JOHN MCDIARMID  
DRAFTS

5 APR - 6 APR 1973

UNCLASSIFIED

VP/WG SEPT 2014

PLEASE RETAIN  
ORIGINAL ORDER

UNARCHIVES

SERIES	<u>S-1906</u>
BOX	<u>4</u>
FILE	<u>11</u>
ACC.	<u>TE 311/1</u>



**UNITED NATIONS  
DEVELOPMENT PROGRAMME**



TELEPHONES: 44366, 43041

21 KASTURBA GANDHI MARG  
NEW DELHI-1

संयुक्त राष्ट्र  
विकास कार्यक्रम

CABLES: UNDEVPRO - NEW DELHI

RECORDS CONTROL

MAY 11 1973

Register

Reference

BHU/PRO/300

6 April 1973

TE 311/1 BHUT

Dear Mr. El-Tawil,

I have your letter of 26 March 1973 about possible assistance to Bhutan under the UN regular programme of technical assistance. I believe the next step would be for Commissioner Farah to explore this matter with the Foreign Minister and the Secretary of Development of Bhutan in Tokyo during the ECAFE Session.

- .. I am enclosing copy of a letter I have written Commissioner Farah along with a copy of my draft report in which I called his attention particularly to paragraph 36 on page 15.
- .. I am enclosing another copy of this draft report for your information although it will be re-edited and revised and you will be getting an official copy in the next week or two. I would ask you, therefore, to keep this copy for your own personal information and that of your close colleagues.

With kind personal regards,

Sincerely yours,

John McDiarmid  
Resident Representative

Mr. Bahgat A. El-Tawil  
Deputy Director  
Asia and Middle East Branch  
OTC, United Nations  
New York

cc. Mr. Basu  
Mr. Barnea



BHU/PRO/300

5 April 1973

Dear Mr. Commissioner,

I sent you the following cable on 3 April:

"BHUTANESE FOREIGN MINISTER AND SECRETARY DEVELOPMENT ATTENDING TOKYO SESSION AND LOOK FORWARD MEETING YOU. MAILING TO TOKYO MY DRAFT REPORT ON BHUTAN MISSION AS BACKGROUND. SUBJECT EYE BELIEVE YOU COULD USEFULLY DISCUSS IS POSSIBILITY ASSISTANCE TO BHUTAN FROM UN REGULAR PROGRAMME. REGARDS "

I received your letters while I was in Bhutan and the Foreign Minister said that he and the Secretary of Development would be coming to the Tokyo ECAFE meeting and would be very glad to talk with you.

...

For your background information, I am enclosing an advance copy of my draft report to UNDP. I hope this will be helpful to you. The only project discussed in this mission which would be implemented by the UNOTC is the one relating to road building machinery and I am hoping to get this financed as provided in the project document, either through UNDP, or the Capital Development Fund, or from some other source which might help us with the equipment component.

You will note in my draft report, paragraph 36, that I was not quite sure what resources or specific fields UNOTC might be able to offer under its regular programme. Consequently, as mentioned in my cable, I would suggest one of the chief subjects of discussion between you and the Bhutanese Delegation, could be what UNOTC might offer from regular budget funds, over and above the programme of assistance covered in my report.

I hope you will have good discussions and when you are finished, if there is anything on which I can help you to clarify or follow-up, please do not hesitate to ask me.

With kind personal regards,

Sincerely yours,

  
John McDiarmid  
Resident Representative

Mr. A.A. Farah  
Commissioner for Technical Cooperation  
c/o Mr. William L. Magistretti  
Representative of the UNDP  
Room 450, Shin Ohtemachi Building  
2-1 Ohtemachi 2-chome  
Chiyoda-ku, Tokyo ZIP 100  
JAPAN

JMD:vs



2.4.1973

DRAFT REPORT

UNDP Mission to Bhutan - 17-31 March 1973

C O N T E N T S

- I Introduction
- II Chief findings and recommendations
- III Background of the mission
- IV Resources situation
  - (a) IPF
  - (b) Special \$35 million Fund for LDCs
  - (c) Other UN programmes and sources of funds
- V Some logistics, administrative and cost of living factors
- VI Question of additional future UN family assistance to Bhutan
  - (a) Agricultural sector and possible other areas not included in detailed discussions of the mission
  - (b) World Food Programme
  - (c) UNICEF
  - (d) UNFPA
  - (e) Regular programmes
  - (f) Bilateral sources
  - (g) Question of investment finance



I. INTRODUCTION

1. This mission visited Bhutan from 17-31 March 1973. It was led by the Resident Representative, United Nations Development Programme, India, John McDiarmid. It included specialists from seven other UN Agencies qualified to analyse the specific project requests UNDP had received from Bhutan. The members of the mission were -

Mr. C.L.Lerche  
Mr. A.D.Granger  
Mr. A. Plenel  
Mr. H.J.Fritz  
Dr. B.G.Prasad  
Mr. A. Madsen  
Mr. R.V.Harris  
Mr. A.Demiruren  
Mr. J.D.Shannon  
Dr. John McDiarmid  
Mr. Paul Matthews  
Mr. K.V.R.Moorthy

Details of the members, indicating nationality, agency represented and projects or sectors concerning each are attached as Annex I.

2. The Terms of Reference for the mission are attached as Annex II. The key paragraph in the terms of reference is the following:

"II. Objectives

The prime objective of the mission will be to review on the spot the requests for assistance received from Bhutan (Bhutan/72/002 through Oll), considering such aspects as eligibility for UNDP assistance, precise needs and possibilities, Bhutanese and UNDP inputs, etc., and to make concrete recommendations as to the assistance which must be rendered by UNDP. Where possible, draft project documents should be prepared in consultation with the Bhutanese authorities so that final decisions on assistance to be rendered can be expedited. "



3. The mission was received by His Majesty the King of Bhutan along with ministers and other high officials of the Bhutan Government. The members of the mission are unanimous in their highest appreciation of the excellent hospitality, warm reception and full and frank discussions with all concerned on the Bhutanese side. The discussions were co-ordinated on the Bhutanese side by His Excellency Lyonpo Dawa Tsering, Minister of Foreign Affairs, who attended all important meetings including those dealing with provisional findings and conclusions in respect of individual project requests.

4. During the mission's first week all the specialists members visited different parts of Bhutan relevant to understanding the projects they were studying and were always accompanied by senior officials of the departments ~~Ministries~~ of the ~~Ministry of Development or Ministry of Finance~~ immediately involved. i.e. Development, Finance, Trade, Industries & Forests, and Communication. One member, Mr. Shannon of ITU, spent a preliminary week in Bhutan, 10-17 March 1973, since his "field observations" had to be more extensive.) Here, again, the spirit of co-operation, helpfulness and constructive dialogue was a matter of great satisfaction and appreciation on the part of the mission members.

5. During the second week all members of the mission gathered in Thimphu, capital of Bhutan, where each individual project in turn, including the elements for project documents - UNDP inputs and Government of Bhutan inputs - was thoroughly discussed. In some cases full agreement was reached at this stage, with only further clarification and drafting required to produce an advanced draft project document. In some cases these first high level discussions resulted in decisions to vary somewhat the features of the project, and after further discussions and drafting virtually complete agreement was also reached in these cases before the mission left Bhutan.



6. "Agreement by the mission", as used above, means a conclusion by the mission leader and the specialist concerned that the project document as finally revised presented a sound proposal within the guidelines of UNDP and that the mission would recommend approval of the document by both the executing agency and UNDP Headquarters as early as possible. It was made quite clear that agreement by the mission carried no commitment of final UNDP decision. In a few cases there ~~was~~<sup>were</sup> reservations on the part of the mission about specific items of assistance requested from UNDP, (e.g. whether alternative sources of aid would be more appropriate) but even in these cases the mission agreed to recommend sympathetic consideration by UNDP Headquarters.

## II. CHIEF FINDINGS AND RECOMMENDATIONS

7. In line with the mission's objectives as quoted in para 2 above, the chief findings and recommendations of the mission are found in the 13 individual project documents drafted in close consultation with the GOB and generally agreed by them - attached seriatim in Annex III. (It should be explained, that for technical reasons, some of the projects originally requested ~~will~~<sup>were</sup> split into two or more requests.)

8. The mission is convinced that some of these <sup>draft</sup> project documents are virtually ready for final signature and all of them are recommended for expeditious consideration and decision by the agencies concerned and UNDP.

9. The mission discussed with the GOB an earlier request for assistance from UPU - constituting 16 fellowships and some equipment, at a total cost to UNDP of \$53,150. The project document was then revised, and this first UNDP project, for Bhutan was approved and signed by the Royal Government of Bhutan, and by McDiarmid on behalf of both UPU and UNDP, on 30 March 1973 (see Annex III).



10. (Para on cement project to be added in New Delhi.)

11. While the project documents themselves are the heart of the missions findings and recommendations, some other major points are worth recording:

(i) After discussions which started during the 1972 mission to Bhutan, continued by the Resident Representative, UNDP, India, with the Permanent Mission of Bhutan to India, and with the Minister of Foreign Affairs of Bhutan on a visit to India, and finally through the discussions of this recent mission, it was agreed by both sides that projects which constituted entirely or chiefly requests for equipment will need to include adequate expertise from the UNDP side. When the discussions were concluded, it had been agreed not only that short term experts would be needed and welcome in certain cases, but that resident experts for certain of the project requests would be welcome by the GOB. As a result, while every effort should be made to avoid over-taxing Bhutan with resident experts, the mission leader and the specialists concerned agreed in the case of each project document that the expertise there provided would be sufficient to meet the requirements of UNDP in relation to the equipment component. This was a most constructive development and in the Mission's opinion augurs well for the success of the early group of Bhutanese assistance projects.

(ii) Another most welcome development is that Bhutan has started construction of six cottages in Thimphu, designed specifically for UN experts, each of which will accommodate two experts (or one family) either for short-term or residential purposes. These cottages will be fully furnished, including electric stoves and refrigerators, by Bhutan. Further, the government has agreed to start promptly on



construction of suitable accommodations for the resident experts envisaged for stations outside of Thimphu, e.g. Bhumthang, Samchi, Deothang, etc.

(iii) Also following discussions which began a year ago, Bhutan has agreed that as a general rule buildings and related construction costs required in the projects would be provided by the GOB. If in a very few cases specialized building needs were felt, such items could be taken up for exceptional consideration.

(iv) GOB also agreed to accept full responsibility for providing essential supporting services for the experts, which hopefully would be minimal. This will include office accommodations, secretarial and typing assistance, <sup>as a general rule</sup> local transportation with drivers, including personal use (running costs to be reimbursed by the expert), etc. The mission hopes that the demands on the government in this respect can be modest, and that experience with the first few projects will give the basis for later developments.

(v) In view of the UNDP total costs involved in the package of project documents, it was agreed that suitable alternative sources of financing would be explored in order to reserve the IPF for contingencies and future requests to the extent possible. Thus, it was felt that some UN family sources other than the IPF of Bhutan might be preferably used, especially for some of the equipment items requested - for example, the Capital Development Fund or, subject of course to UNICEF's agreement, some equipment inputs from that organization, as for example for TB Control.



III. BACKGROUND OF THE MISSION

12. Soon after Bhutan became a member of the UN in late 1971, a first UNDP reconnaissance mission, consisting of the Resident Representative, UNDP, India, accompanied by his Assistant Resident Representative, Mr. Paul Matthews, visited Bhutan for some two weeks in March/April 1972. Most of the general considerations which would be involved in UNDP assistance to Bhutan were thoroughly explained and discussed. Preliminary discussions were had both with the ministers and officials of the government, and in greater detail with the heads of the development departments, exploring what specific assistance Bhutan would wish to receive from UNDP. The report of this mission was filed on.....and circulated to the UNDP and all related UN Agencies.

13. During the first mission Bhutan was asked to reduce to writing specific project requests and a total of ten requests were sent to UNDP from April 1972 through January 1973. The present mission was therefore mounted in direct response to these specific written requests received from the GOB.

14. The specific requests had been circulated, depending on the substance of each, to those UN participating agencies which seemed most competent to handle them. At the request of UNDP each agency concerned designated one or more specialists to join the recent mission as indicated above (see Annex I.).

15. On 21 February 1973, three basic agreements between Bhutan and UNDP, regarding technical assistance, special fund type assistance and OPAS assistance, were formally signed in New Delhi by the Representative of Bhutan to India on behalf of his Government and by the Resident Representative, UNDP, India, on behalf of his Headquarters. These agreements, therefore, give the legal basis for pursuing a specific and agreed programme of UNDP assistance to Bhutan.



IV. RESOURCES SITUATION

16. The Governing Council of the UNDP approved in June 1972 an IPF of \$2.5 million for Bhutan for the five year period 1 January 1972 through December 1976 (inclusive).

17. The Governing Council at its January 1973 session, set aside <sup>36</sup> \$ million dollars to be used, under conditions prescribed by the Council, solely for *special measures to assist* ~~improving the GDPs of~~ the 25 least developed countries, of which Bhutan is one, for the period 1973-76. The Council also agreed that the Capital Development Fund should be used primarily ~~for~~ for the least developed countries.

18. It has been agreed in principle by UNDP and the GOB that projects or parts of projects suitable for financing by the Capital Development Fund (CDF) should be so financed, after of course careful review and within the limit<sup>2</sup> of funds available to Bhutan through the CDF.

19. A table indicating the quantum of assistance from UNDP for all of the project documents developed by this mission is attached as Annex IV. Since the duration proposed for some of the projects is more than 3 years, some costs of those projects, if approved, would spill over into 1977 and later, and thus not be expenditure within the 2.5 million dollar IPF <sup>period</sup>. It will be seen that the estimated cost ~~to the IPF~~ for 1973-76 for all of the project documents now submitted, if approved promptly, would be some \$3.8 million (?).

This of course assumes implementation of UNDP inputs on schedule, without any slippage in recruitment, fellowship placement, equipment provision, etc. It is thus clear that before all of these projects could be approved, guarantee of additional resources <sup>above the IPF of \$2,500,000</sup> ~~(see paragraphs 16, 17, and 18 above)~~ will have to be provided. If, say, one million dollars from the \$35 million <sup>for "special measures"</sup> ~~special fund~~ could be added to Bhutan's IPF, this would largely solve the financial problem. Further, of course, any of the UNDP inputs which could



be financed from the CDF, UNICEF, Regular programmes or bilateral donors, would change the picture substantially.

20. The table at Annex V indicates the estimated expenses by UNDP for the major inputs - expertise, fellowships, equipment - spread over the years 1973-76, assuming reasonably quick approval of the new projects.

21. It is hoped that when the project documents have been discussed with the participating agencies and with UNICEF, it may be possible to finance some parts of certain of these projects from Regular budget funds or UNICEF funds thus reducing the demand on the Bhutan IPF.

21A. WHO has decided in principle that its Regular Funds, under suitable conditions, might be available for assistance to Bhutan although the latter is not at present a member of the WHO.

22. The WFP has indicated a keen interest in exploring the possibility of assistance to Bhutan and it may be that WFP projects which would substantially support and bolster UNDP projects might be developed, For example, in paying part wages of workers in road construction, or in institutional feeding, etc.

V. LOGISTICS, ADMINISTRATIVE AND COST OF LIVING FACTORS

23. The mission leader had detailed discussions with the Foreign Minister on various logistical, administrative and related matters which would arise if the programme of assistance being requested by Bhutan is approved. The first draft of a post report is being prepared by the Resident Representative-India and will be circulated to UNDP and agencies well in advance of the arrival of the first expert.

24. It is clear that living costs in Bhutan will be modest and that in fact there is not a great deal over the basic essentials on which experts will wish to spend money. The currency in use in Bhutan is the Indian Rupee and all local purchases, payments etc. will be made in this currency. *(with reasonable rental to be paid by the experts)* Since the Government will provide furnished living quarters and local transportation, it is expected that experts would be able to make considerable savings out of their salary and allowances - subject of course to the possibility of heavy expenses at home involved in maintaining two houses, fixed charges, education of children at home etc., etc. Thus, in some cases the mandatory 25% of salary in local currency plus allowances could conceivably be more than will be expended by the expert.

25. It is quite certain that there will be no possibility of having the Bhutanese Government convert any rupees into hard currency and this should be made clear to all concerned. This may require some special consideration based on experience, of the "mandatory portions of salary" provisions.

26. The question of who should provide supporting services such as office accommodation, secretarial and typing help, transport for official purposes etc., was thoroughly discussed with it being made clear that payment for any of these charges by the UNDP would have to come out of the IPF figure. The GOB generously concluded that it would assume all these obligations.



For example, the Government would set up, at the outset, a very small pool of secretarial and typing help available to experts in Thimphu. Even where local supporting staff of non-Bhutanese nationality will have to be employed, the GOB will assume the costs.

27. As for local transportation, by far the most practical vehicle is a good jeep, perhaps 4-wheel drive, depending on the circumstances. Here again, the GOB said it would <sup>as a general rule</sup> provide each expert with such a jeep and driver at government expense. Personal cars are not practicable and their import will not normally be necessary nor is it recommended. The official jeep, however, will be at the full-time disposal of the expert, though he would be asked to pay running costs for week-end and private use.

28. The mission leader and the Minister of Foreign Affairs discussed the possibility of some UNDP representation in Bhutan. It was entirely agreed that every effort should be made to avoid a costly arrangement and that an experimental approach should be used. One possibility would be to ask a suitable expert in Thimphu, who could be thoroughly briefed in Delhi or by visits from the Delhi UNDP office, to serve also as Liaison Officer for UNDP matters. This experiment commends itself to the mission leader. Another, and perhaps complementary, arrangement would be, depending on the timing, size and flow of expertise and equipment to Bhutan, to assign from the UNDP office in Delhi an experienced senior Indian officer who could serve as Liaison Officer in Thimphu, temporarily or on a continuous basis as necessary, to assist experts in all logistical, administrative, personal financial matters etc. In principle, the GOB would agree to such an arrangement at the time thought suitable by UNDP.

(Any additional items?)



VI. ADDITIONAL AND FUTURE UN FAMILY ASSISTANCE

29. It should be recognised that the present programme of assistance which represents the needs requested by Bhutan has now reached proportions approaching or exceeding the IPF possibilities, depending on factors mentioned above in paragraph 19. The GOB and the mission agreed, however, that the best course would be to go ahead with consideration of the project documents already submitted and not suspend everything until a formal country programme, with all its trappings, could be developed. Provisionally, the team leader agreed with the GOB that the optimum time for developing a country programme would be in the period say - preceding 1 April 1976, which would be the beginning of Bhutan's fourth Five Year Development Plan. This practical approach, while avoiding a substantial delay in trying for a country programme at this stage, will also provide some substantial experience with individual projects approved and under implementation in the period 1973-75.

30. Nevertheless, there is one important area of Bhutan's development which has been almost inadvertantly omitted from the present programme - viz. the agriculture sector in which Bhutan believes and the mission leader agrees, that given more time for development of sound projects UNDP assistance could be especially useful. Thus some preliminary discussion was held about some 8 different possible projects in the agricultural sector, but at the government's request it was agreed to leave these for further study by the government and later development to the extent the IPF situation would warrant.

31. There were also a few other possible projects which might involve additional requests in the near future. For example, development of Bhutan's mineral resources which <sup>has</sup> ~~have~~ been under general, but not intensive, study by the Geological Survey of India (Bhutan circle) for some 10 years and which forms part of the present development plan, might benefit from some small UNDP inputs.



Specifically, in the project exploring lead and zinc deposits, present resources will only permit Bhutan to purchase one <sup>light-weight portable</sup> ~~mobile~~ drill and the provision of 3 or 4 more, which could be well used by the Bhutanese with the Indian GSI assistance, would substantially expedite exploration tests. The cost of 3-4 drills, for example, would be something like \$20,000 and the benefit accruing to Bhutan could be marked.

WFP: The team leader, who also represents WFP, told the Bhutan Government that in principle WFP would very much like to be of assistance to the country's economic development. Bhutan would welcome such assistance in suitable cases. Two specific possibilities were discussed:

(a) Food for road construction workers' wages: Bhutan supplied a list of some 3,600 construction workers now engaged in road development - a most important infrastructure in Bhutan. At the present time food rations are provided by the GOB through an administrative arrangement already well worked out, but two factors are important. First, this provision of food costs the Bhutanese government considerable sums from their meagre resources. Second, the nutritional package should be improved, and could be with WFP assistance. While any such project will have to be worked out thoroughly and in considerable detail, it seems that an appropriate daily food ration supplied by WFP could be distributed to some 3,600 workers which would save Bhutanese government some Rs. 200,000 per annum. The GOB will give firm guarantees to use this saving for agreed, specified additional development purposes.

(b) Bhutan has a large educational programme based on the English medium and one of the problems, which is difficult both for families sending their children to school and the Government itself, is to provide solid nutritional meals in the schools.



In the preliminary discussions the Government gave us an estimate of 3,700 school students in 7 schools where WFP assistance for one or two good meals per day would be greatly appreciated and would save resources which could be earmarked for additional educational or other development purposes. Here again, details will have to be carefully worked out.

(c) Some other institutional feeding programmes - for example, vocational and polytechnic institutions, hospitals, etc. may be considered by WFP.

32. UNICEF: The Mission leader was not specifically authorised by UNICEF to explore possible UNICEF assistance to Bhutan but he did indicate to the Regional Director of UNICEF in India he would have some exploratory talks and report fully on the result. Specifically one of the project documents (see Annex III) attached, TB Control<sup>1</sup>, would provide for suitable equipment, <sup>drugs</sup> vaccines, etc. of the sort UNICEF is supplying in programmes in other countries. Substantial collaboration by UNICEF in this project along with WHO would be a welcome contribution to the GOB and would certainly relieve the IPF picture. Secondly, UNICEF assistance in any programme developed in the field of population and family planning, which would include strengthening Maternity and Child Health services would also seem to the mission leader to be worth exploring. Thirdly, there are no doubt other areas in which UNICEF might be interested -for example, sanitary, town and village water supply, which figures in the third Development Plan, but which is slowed down by lack of resources.

33. The mission leader recommended to the GOB that it receive a representative of UNICEF for discussion on these and other possibilities, and on the last day of the mission, he was told by the government that they would welcome such a visit, preferably after the year of mourning of His Late Majesty, which ends in late July 1973 - thus, say in late August or September 1973.



34. UNFPA: The mission leader and his assistant, Mr. Paul Matthews, who looks after UNFPA business in India, had several discussions along with Dr. Prasad of WHO, with Bhutanese officials about a possible UNFPA programme of assistance to Bhutan. Preliminary discussions resulted in the drafting of a long-term programme which the GOB said they would like to consider in greater detail particularly regarding the phasing of the programme, and possibly come forward with a specific request in due course. This matter will be followed up by the Resident Representative, UNDP, India.

35. REGULAR PROGRAMMES: The mission was not specifically briefed for discussion of possible assistance to Bhutan from the Regular Programmes of UN agencies. The WHO member of the mission did, however, tell the GOB that WHO had decided in principle that Regular Programme funds could be used for assistance to Bhutan even though the latter was not a WHO member. No doubt, this question of WHO assistance - perhaps, for example, as partial financing of the TB Control project, could be followed up.

36. UNOTC: While having no specific brief, the mission leader understood UN Regular Programme funds were now available primarily (?) for least developed countries of which Bhutan is one. It has been arranged that the UN Commissioner for Technical Co-operation will be meeting the Foreign Minister of Bhutan and the Secretary of Development during the course of the ECAFE meeting in Tokyo beginning 11 April 1973. It is hoped that these discussions will give some indication of possible assistance to Bhutan from ~~the~~ UN Regular Funds.

36. Bilateral donors. The Bhutanese government has received and welcomed some assistance from bilateral donors other than India, chiefly through the Colombo Plan. For example, many of Bhutanese fellowship needs are met in this way, and some useful equipment, livestock, etc. have also been received.



37. The Mission leader explained to the GOB the wishes of the Governing Council that UNDP assistance should be coordinated with that of bilateral donors, under arrangements agreeable to the recipient government concerned. The GOB agreed that appropriate bilateral donors could be informed by the mission leader of the programme of assistance now being requested by Bhutan. Offers of complementary or associated aid, especially where it would relieve the IPF, could be explored informally and provisionally.

38/ The question of investment

UNDP's arrangements for offering investment advice to recipient countries were explained by the mission leader. In appropriate cases, Bhutan would welcome such help from UNDP. One specific example could be the cement plant project (see para \_\_\_\_ and annex III), which eventually would require heavy investment in buildings and machinery, and which will have to go through some early stages including a final "bankable feasibility study" before investment decisions could be wisely made.

39. This matter will be followed up as necessary by the Resident Representative, UNDP, India.



*Draft*

*Consultation*

*Document*

*with Mr. Harish*

*2/12/72*

UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Royal Government of  
BHUTAN

Title : MECHANIZATION OF ROAD WORKS  
Number : BHU/72/009/A/01/01 Duration : Three years  
Sector : Transport and Communications  
Sub-sector : Transport by land  
Government Co- : public Works Department of Executing  
operating Agency the Ministry of Development Agency; United Nations  
Date of : 1972 Starting  
submission Date : May, 1972  
Government : RS. 1,540,000  
contribution UNDP  
(Equivalent to US\$ 205,333) contri- : \$ 702,000  
Approved : bution  
*702,000*

\_\_\_\_\_  
On behalf of the Government

Date : \_\_\_\_\_

\_\_\_\_\_  
On behalf of the Executing Agency

Date : \_\_\_\_\_

\_\_\_\_\_  
On behalf of the UNDP

Date : \_\_\_\_\_



## 1. BACKGROUND AND SUPPORTING INFORMATION

### A. Justification for the Project

Under the current Five Year Plan, to be completed in April 1976, the major task of the public works Department of the Ministry of Development is to construct new roads at the rate of some 40 kilometers yearly. The Department's further responsibilities include the maintenance of a road network totalling approximately 150 kilometers, the construction of municipal infrastructure, and the construction of miscellaneous hydraulic facilities for irrigation and water supply. It is anticipated that the Department's work load will significantly increase in the forthcoming Five Year Plan, starting in April, 1976.

The purpose of the Department's road construction programme is to connect heretofore isolated communities with the existing road network, thereby enabling development in all economic and social fields. The nature of the work is such that small construction projects averaging 5 to 10 kilometers in length are distributed throughout the entire country. Based on careful studies of future expansion requirements and of transport and maintenance economy, the government adopted relatively high standards for the construction programme. Design speeds are set for an average of 40 km per hour. <sup>all</sup> ~~all~~ roads are to be hard-surfaced.

Owing to the country's exceptionally severe topographic constraints, optimum economy in road construction requires a blend of mechanization and labour-intensive methods. The use of equipment is particularly essential for three specific operations :

- a) Deep formation cutting where large quantities of earth cannot be excavated and transported by hand;
- b) Rock excavation where large quantities of drilling are required for blasting; and
- c) Compaction of road materials to high densities as required to support modern vehicular traffic.



Significantly, the Department's programme is aimed at roads for rural development. The construction of primary arterials is necessary completion under bilateral assistance from India. Maintenance of the primary network is now assured by the Indian Border Roads organization under arrangements which will continue for the foreseeable future. Page 3

In addition to considerations of construction economy, the use of equipment for road building is imperative by virtue of the country's scarcity of labour. It is to be recalled in this connexion that the quasi-totality of the labour force for the Department's work is being imported to the country from neighbouring areas.

The project, comprising an input of equipment and expertise from the UNDP, together with facilities for equipment operation, servicing, and repairs from the government, is viewed as the means to introduce sound mechanization practices and accelerate road construction during the country's current five year plan. It is anticipated that such practices will be firmly established at the end of the project in 1976, and that the implementation of an expanded road construction programme under a subsequent development phase will be made possible.

#### B. Institutional framework

The project will be carried out within the institutional framework of the public works Department under the Ministry of Development.

The budget available to the Department for road construction, <sup>and maintenance</sup> is of the order of US \$ 2.0 million yearly. This is deemed to be sufficient for carrying out the envisaged road construction programme including the mechanization project as an integral part thereof.

In regard to personnel, the government now has at its disposal the required administrative and technical staff and the labour for undertaking the programme. Operators and mechanics to handle an expanded equipment pool are available.

In regard to facilities, the Department has at its disposal 3 existing mechanical shops at key locations in the country. These shops are to be strengthened with tools and spare parts, and they are to be supplemented by mobile service units from the project. Major equipment repairs, as opposed to service, are to be carried out at workshops operated under the Ministry of Finance.

The sufficiency of the Department's organization for undertaking the mechanization project was ascertained in March 1973 by a Technical Advisor of the United Nations.



C. Provision for Government follow-up

It is anticipated that upon completion of the project, the public works Department will have successfully introduced mechanization for its road construction programmes, including such aspects as staff, organization, methods, and equipment servicing procedures. The Department will also be in possession of operational road working equipment from the project. These will constitute the nucleus of an expanded road construction <sup>and maintenance</sup> programme for the following Five Year Plan.

D. Other related activities

It is significant that the government <sup>is expecting for</sup> (will) receive UNDP assistance under project BHU/72/005, where expertise, training and provisions of equipment will be used to strengthen the workshops of the Ministry of Finance. Whereas servicing of road-building machinery under project BHU/72/009 will be assured through the public works Department, the workshops of the Ministry of Finance are counted upon, inter alia, for major repairs of this machinery. Project BHU/72/005 is viewed in this connection as a complement of project BHU/72/009.

E. Future UNDP assistance

UNDP assistance may be required at a future date, both in mechanization of road construction, and in road planning and execution. The nature of such assistance cannot, however, be defined at this time.



## II. OBJECTIVES OF THE PROJECT

*There is as yet no Country Programme for Bhutan.*  
Long term objectives

The long-term objectives of the project are to enable the public works Department accelerate and improve its current road construction programme and to undertake an expanded programme in the forthcoming Five Year Plan, starting in 1976. The establishment of an optimum balance between the utilization of labour and of construction machinery <sup>is</sup> required in this connection.

### Immediate objectives

The immediate objectives of the project are to introduce mechanization for certain road construction activities of the public works Department, in accordance with the following sequence :

- a) Selection of equipment and of corresponding spare parts and tools to satisfy job requirements and prevailing constraints.
- b) Procurement of such equipment, spare parts and tools.
- c) Preparation of schedules and specification of procedures for equipment maintenance, servicing and repairs.
- d) Utilization of equipment under actual, on the job conditions, including maintenance, servicing and repairs.



III. WORK PLANA. Description of project activities

1. Preparatory activities to be carried out by the Government to ensure the timely implementation of the project :

None required.

2. Activities to be undertaken during the project

<u>Project activities</u>	<u>Location</u>	<u>Proposed duration and starting date</u>
Preparation of job descriptions	New York	1 week, 1 May 1973
Approval of job descriptions by the Government	Thimphu	2 weeks, 15 May 1973
Recruitment of equipment expert	New York	1 month, 1 June '73
Field assignment of equipment expert and preparation of equipment purchase orders	As required	6 weeks, 1 July '73
Procurement and delivery of equipment	-do-	12 months, 1 Aug 1973
Recruitment of maintenance and service expert	New York	6 months, 1 Feb 1974
Field assignment of maintenance and service expert	Thimphu	6 months 1 Aug 1974
Road construction	As required	21 months 1 Aug 1974
Recruitment of expert in mechanization.	New York	2 months, 1 Jan 1976
Final project review and preparation of recommendations for mechanization of road construction during Fourth Five Year Plan	Thimphu	2 months, 1 March 1976

B. Description of UNDP inputs

1. Assignment of international staff

a) Equipment expert ; Starting date : 1 July, 1973

Duration of assignment : 6 weeks

Following initial briefing by the Executing Agency, the expert shall visit equipment manufactures as required and assemble documentation in regard to equipment characteristics,



costs, delivery times, and equipment maintenance and service requirements. He shall then proceed to Thimphu and, working in close collaboration with officers of the Public Works Department, he shall prepare purchase orders for equipment, spare parts and tools, taking due account of particular job requirements and constraints in mechanized road construction operations in Bhutan.

b) Maintenance and Service expert : Starting date :  
1 August, 1974

Duration of assignment : 6 months

The expert shall be assigned to Thimphu and he shall travel throughout the country as necessary. His function shall be to establish schedules and to specify and introduce procedures for the maintenance and servicing of project equipment. He shall furthermore advise the Public Works Department in regard to the training of personnel for maintenance and service operations, and he shall initiate on-the-job training of equipment operators and mechanics in connection with machinery delivered under the project, emphasizing such procedures as may be new to counterpart personnel.

c) Expert in mechanization : Starting date : 1 March, 1976  
Duration of assignment : 2 months

The expert shall be assigned in Thimphu where he shall work in close collaboration with officers of the Public Works Department. He shall review the findings of the project in regard to mechanization of road construction and, drawing on such findings, he shall prepare recommendations for the mechanization of an expanded road construction programme during the country's Fourth Five Year Plan. Recommendations shall include the preparation of a schedule for further equipment procurement in function of anticipated needs as well as the outline of a programme for training and operation.



2. provision of subcontractual services

Not applicable.

3. Training provisions

Not applicable.

4. UNDP provided supplies and equipmenta) Non-expendable equipment

<u>Item</u>	<u>Quantity</u>	<u>Delivery date</u>	<u>Cost ( US \$ )</u>
Bulldozer, 200 HP	10	1 Aug 74 or earlier	320,000
Road roller, 8-10 T	6	-do-	88,000
Portable rock-drill	100	-do-	100,000
Low-bed transporter	2	-do-	26,000
Mobile service unit	2	-do-	26,000
			<u>560,000</u>

b) Expendable equipment

<u>Item</u>	<u>Quantity</u>	<u>Delivery date</u>	<u>Cost ( U.S. \$ )</u>
Spare parts for non-expendable equipment	AS reqd. for 3 years	1 August 1974 or earlier	181,000
Special tools for non-expendable equipment	AS required	-do-	12,000
Kits, mechanic's tools	5	-do-	5,250
			<u>198,250</u>

c) Miscellaneous

Not applicable.

C. Description of Government inputs1. pre-requisite activities

Not applicable.

2. Assignment of national staff

a) The Chief Engineer : acting as necessary through staff of the public works Department, shall assure the timely and effective prosecution of the project on behalf of the



government as well as the co-ordination of activities with international experts.

b) Equipment operators, mechanics, assistants, labourers and other non-professional personnel shall be provided by the Public Works Department, starting at the time of delivery of equipment, and continuing until the project's conclusion. The requirements and status of non-professional personnel are as follows :-

Category	Project Requirement	Presently available for project	To be recruited
Equipment operator	25	10	15
Service mechanic	6	6	-
Assistant Mechanic	18	6	12
Store-keeper	4	4	-
Clerk	10	2	8
Driver	10	-	10
Labourer, guard, etc.	100	100	-

### 3. Government provided supplies, equipment and buildings

#### a) Non-expendable equipment and buildings

Item	Quantity	Delivery date	Cost ( Rs. )
Existing P. W. D. Mechanical workshops	3	1 Aug 1974 or earlier	150,000
Temporary equipment sheds	As reqd.	-do-	100,000
Service vehicles	-do-	-do-	30,000

#### b) Expendable equipment and supplies

Item	Quantity	Delivery date	Cost ( Rs. )
Fuel and lubricants for operation of eqpt.	As reqd.	1 Aug 1974 or earlier	760,000
Miscellaneous equipment and supplies	-do-	-do-	100,000



Project Budget covering UNDP Contribution

( In US Dollars )

Country : Bhutan  
 Project No. : BHU/72/009/A/01/01  
 Title : Mechanization of Road Works

	Total m/m \$	1973 m/m \$	1974 m/m \$	1975 m/m \$	1976 m/m \$
10. <u>PROJECT PERSONNEL</u>					
11. <u>Experts</u>					
11.01 Equipment Ex Expert	1½ 3,750	1½ 3,750			
11.02 Maintenance and service expert	6 15,000		5 12,500	1 2,500	
11.03 Mechanization expert	2 5,000				2 5,000
19. COMPONENT <del>XXXXX</del> TOTAL	9½ 23,750	1½ 3,750	5 12,500	1 2,500	2 5,000
40. <u>EQUIPMENT</u>					
41. Expendable Equipment	198,250	38,250	160,000		
42. Non-expendable Eqpt.	560,000	100,000	460,000		
49. Component Total	758,250	138,250	620,000		
99. GRAND TOTAL	782,000	142,000	632,500	2,500	5,000



Project Budget Covering Government Counterpart  
Contribution In Kind

Country : Bhutan  
Project Number :  
Title :

	<u>Total</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
	m/m Rs.	m/m Rs.	m/m Rs.	m/m Rs.	m/m Rs.

10. PROJECT PERSONNEL

Technical Personnel	25	100,000	5	20,000	12	48,000	3	12,000	5	20,000
---------------------	----	---------	---	--------	----	--------	---	--------	---	--------

Non-Technical Personnel	200	300,000	-		50	75,000	120	180,000	30	45,000
-------------------------	-----	---------	---	--	----	--------	-----	---------	----	--------

19. Component Total	225	400,000	5	20,000	62	123,000	123	192,000	35	65,000
---------------------	-----	---------	---	--------	----	---------	-----	---------	----	--------

40. EQUIPMENT

41. Expendable Equipment	100,000	-		25,000	60,000	15,000
--------------------------	---------	---	--	--------	--------	--------

42. Non-expendable Equipment	180,000	-		45,000	108,000	27,000
------------------------------	---------	---	--	--------	---------	--------

43. Premises	100,000	-		25,000	60,000	15,000
--------------	---------	---	--	--------	--------	--------

49. Component Total	380,000	-		95,000	228,000	57,000
---------------------	---------	---	--	--------	---------	--------

50. MISCELLANEOUS

51. Operation and Maintenance of equipment	760,000	-		190,000	456,000	114,000
--	---------	---	--	---------	---------	---------

53. Sundry	-	-		-	-	-
------------	---	---	--	---	---	---

59. Component Total	760,000	-		190,000	456,000	114,000
---------------------	---------	---	--	---------	---------	---------

99. GRAND TOTAL	1,540,000	20,000		408,000	876,000	236,000
-----------------	-----------	--------	--	---------	---------	---------



UNITED NATIONS  
DEVELOPMENT PROGRAMME



संयुक्त राष्ट्र  
विकास कार्यक्रम

TELEPHONES: 44366, 43041

21 KASTURBA GANDHI MARG,  
NEW DELHI-1

CABLES: UNDEVPRO - NEW DELHI

Reference BHU/PRO/300

Dear Mr. Commissioner,

I sent you the following cable on 3 April:

"BHUTANESE FOREIGN MINISTER AND SECRETARY DEVELOPMENT ATTENDING TOKYO SESSION AND LOOK FORWARD MEETING YOU. MAILING TO TOKYO MY DRAFT REPORT ON BHUTAN MISSION AS BACKGROUND. SUBJECT EYE BELIEVE YOU COULD USEFULLY DISCUSS IS POSSIBILITY ASSISTANCE TO BHUTAN FROM UN REGULAR PROGRAMME. REGARDS "

I received your letters while I was in Bhutan and the Foreign Minister said that he and the Secretary of Development would be coming to the Tokyo ECAFE meeting and would be very glad to talk with you.

...

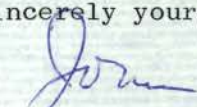
For your background information, I am enclosing an advance copy of my draft report to UNDP. I hope this will be helpful to you. The only project discussed in this mission which would be implemented by the UNOTC is the one relating to road building machinery and I am hoping to get this financed as provided in the project document, either through UNDP, or the Capital Development Fund, or from some other source which might help us with the equipment component.

You will note in my draft report, paragraph 36, that I was not quite sure what resources or specific fields UNOTC might be able to offer under its regular programme. Consequently, as mentioned in my cable, I would suggest one of the chief subjects of discussion between you and the Bhutanese Delegation, could be what UNOTC might offer from regular budget funds, over and above the programme of assistance covered in my report.

I hope you will have good discussions and when you are finished, if there is anything on which I can help you to clarify or follow-up, please do not hesitate to ask me.

With kind personal regards,

Sincerely yours,

  
John McDiarmid  
Resident Representative'

Mr. A.A. Farah  
Commissioner for Technical Cooperation  
c/o Mr. William L. Magistretti  
Representative of the UNDP  
Room 450, Shin Ohtemachi Building  
2-1 Ohtemachi 2-chome  
Chiyoda-ku, Tokyo ZIP 100  
JAPAN




2.4.1973

DRAFT REPORT

UNDP Mission to Bhutan - 17-31 March 1973

C O N T E N T S

- I Introduction
- II Chief findings and recommendations
- III Background of the mission
- IV Resources situation
  - (a) IPF
  - (b) Special \$35 million Fund for LDCs
  - (c) Other UN programmes and sources of funds
- V Some logistics, administrative and cost of living factors
- VI Question of additional future UN family assistance to Bhutan
  - (a) Agricultural sector and possible other areas not included in detailed discussions of the mission
  - (b) World Food Programme
  - (c) UNICEF
  - (d) UNFPA
  - (e) Regular programmes
  - (f) Bilateral sources
  - (g) Question of investment finance





I. INTRODUCTION

1. This mission visited Bhutan from 17-31 March 1973. It was led by the Resident Representative, United Nations Development Programme, India, John McDiarmid. It included specialists from seven other UN Agencies qualified to analyse the specific project requests UNDP had received from Bhutan. The members of the mission were -

Mr. C.L.Lerche  
Mr. A.D.Granger  
Mr. A. Plenel  
Mr. H.J.Fritz  
Dr. B.G.Prasad  
Mr. A. Madsen  
Mr. R.V.Harris (from UNOTC)  
Mr. A.Demiruren  
Mr. J.D.Shannon  
Dr. John McDiarmid  
Mr. Paul Matthews  
Mr. K.V.R.Moorthy

Details of the members, indicating nationality, agency represented and projects or sectors concerning each are attached as Annex I.

2. The Terms of Reference for the mission are attached as Annex II. The key paragraph in the terms of reference is the following:

"II. Objectives

The prime objective of the mission will be to review on the spot the requests for assistance received from Bhutan (Bhutan/72/002 through Oll), considering such aspects as eligibility for UNDP assistance, precise needs and possibilities, Bhutanese and UNDP inputs, etc., and to make concrete recommendations as to the assistance which must be rendered by UNDP. Where possible, draft project documents should be prepared in consultation with the Bhutanese authorities so that final decisions on assistance to be rendered can be expedited. "



3. The mission was received by His Majesty the King of Bhutan along with ministers and other high officials of the Bhutan Government. The members of the mission are unanimous in their highest appreciation of the excellent hospitality, warm reception and full and frank discussions with all concerned on the Bhutanese side. The discussions were co-ordinated on the Bhutanese side by His Excellency Lyonpo Dawa Tsering, Minister of Foreign Affairs, who attended all important meetings including those dealing with provisional findings and conclusions in respect of individual project requests.

4. During the mission's first week all the specialists members visited different parts of Bhutan relevant to understanding the projects they were studying and were always accompanied by senior officials of the departments <sup>ministries</sup> of the ~~Ministry of Development or Ministries as known~~ immediately involved. i.e. Development, Finance, Trade, Industries & Forests, and Communication, (One member, Mr. Shannon of ITU, spent a preliminary week in Bhutan, 10-17 March 1973, since his "field observations" had to be more extensive.) Here, again, the spirit of co-operation, helpfulness and constructive dialogue was a matter of great satisfaction and appreciation on the part of the mission members.

5. During the second week all members of the mission gathered in Thimphu, capital of Bhutan, where each individual project in turn, including the elements for project documents - UNDP inputs and Government of Bhutan inputs - was thoroughly discussed. In some cases full agreement was reached at this stage, with only further clarification and drafting required to produce an advanced draft project document. In some cases these first high level discussions resulted in decisions to vary somewhat the features of the project, and after further discussions and drafting virtually complete agreement was also reached in these cases before the mission left Bhutan.



6. "Agreement by the mission", as used above, means a conclusion by the mission leader and the specialist concerned that the project document as finally revised presented a sound proposal within the guidelines of UNDP and that the mission would recommend approval of the document by both the executing agency and UNDP Headquarters as early as possible. It was made quite clear that agreement by the mission carried no commitment of final UNDP decision. In a few cases there <sup>were</sup> ~~was~~ reservations on the part of the mission about specific items of assistance requested from UNDP, (e.g. whether alternative sources of aid would be more appropriate) but even in these cases the mission agreed to recommend sympathetic consideration by UNDP Headquarters.

## II. CHIEF FINDINGS AND RECOMMENDATIONS

7. In line with the mission's objectives as quoted in para 2 above, the chief findings and recommendations of the mission are found in the 13 individual project documents drafted in close consultation with the GOB and generally agreed by them - attached seriatim in Annex III. (It should be explained, that for technical reasons, some of the projects originally requested <sup>were</sup> ~~will~~ split into two or more requests.)

8. The mission is convinced that some of these <sup>draft</sup> project documents are virtually ready for final signature and all of them are recommended for expeditious consideration and decision by the agencies concerned and UNDP.

9. The mission discussed with the GOB an earlier request for assistance from UPU - constituting 16 fellowships and some equipment, at a total cost to UNDP of \$53,150. The project document was then revised, and this first UNDP project, for Bhutan was approved and signed by the Royal Government of Bhutan, and by McDiarmid on behalf of both UPU and UNDP, on 30 March 1973 (see Annex III).



10. (Para on cement project to be added in New Delhi.)

11. While the project documents themselves are the heart of the missions findings and recommendations, some other major points are worth recording:

(i) After discussions which started during the 1972 mission to Bhutan, continued by the Resident Representative, UNDP, India, with the Permanent Mission of Bhutan to India, and with the Minister of Foreign Affairs of Bhutan on a visit to India, and finally through the discussions of this recent mission, it was agreed by both sides that projects which constituted entirely or chiefly requests for equipment will need to include adequate expertise from the UNDP side. When the discussions were concluded, it had been agreed not only that short term experts would be needed and welcome in certain cases, but that resident experts for certain of the project requests would be welcome by the GOB. As a result, while every effort should be made to avoid over-taxing Bhutan with resident experts, the mission leader and the specialists concerned agreed in the case of each project document that the expertise there provided would be sufficient to meet the requirements of UNDP in relation to the equipment component. This was a most constructive development and in the Mission's opinion augurs well for the success of the early group of Bhutanese assistance projects.

(ii) Another most welcome development is that Bhutan has started construction of six cottages in Thimphu, designed specifically for UN experts, each of which will accommodate two experts (or one family) either for short-term or residential purposes. These cottages will be fully furnished, including electric stoves and refrigerators, by Bhutan. Further, the government has agreed to start promptly on



construction of suitable accommodations for the resident experts envisaged for stations outside of Thimphu, e.g. Bhumthang, Samchi, Deothang, etc.

(iii) Also following discussions which began a year ago, Bhutan has agreed that as a general rule buildings and related construction costs required in the projects would be provided by the GOB. If in a very few cases specialized building needs were felt, such items could be taken up for exceptional consideration.

(iv) GOB also agreed to accept full responsibility for providing essential supporting services for the experts, which hopefully would be minimal. This will include office accommodations, secretarial and typing assistance, <sup>as a general rule</sup> local transportation with drivers, including personal use (running costs to be reimbursed by the expert), etc. The mission hopes that the demands on the government in this respect can be modest, and that experience with the first few projects will give the basis for later developments.

(v) In view of the UNDP total costs involved in the package of project documents, it was agreed that suitable alternative sources of financing would be explored in order to reserve the IPF for contingencies and future requests to the extent possible. Thus, it was felt that some UN family sources other than the IPF of Bhutan might be preferably used, especially for some of the equipment items requested - for example, the Capital Development Fund or, subject of course to UNICEF's agreement, some equipment inputs from that organization, as for example for TB Control.



III. BACKGROUND OF THE MISSION

12. Soon after Bhutan became a member of the UN in late 1971, a first UNDP reconnaissance mission, consisting of the Resident Representative, UNDP, India, accompanied by his Assistant Resident Representative, Mr. Paul Matthews, visited Bhutan for some two weeks in March/April 1972. Most of the general considerations which would be involved in UNDP assistance to Bhutan were thoroughly explained and discussed. Preliminary discussions were had both with the ministers and officials of the government, and in greater detail with the heads of the development departments, exploring what specific assistance Bhutan would wish to receive from UNDP. The report of this mission was filed on.....and circulated to the UNDP and all related UN Agencies.

13. During the first mission Bhutan was asked to reduce to writing specific project requests and a total of ten requests were sent to UNDP from April 1972 through January 1973. The present mission was therefore mounted in direct response to these specific written requests received from the GOB.

14. The specific requests had been circulated, depending on the substance of each, to those UN participating agencies which seemed most competent to handle them. At the request of UNDP each agency concerned designated one or more specialists to join the recent mission as indicated above (see Annex I.).

15. On 21 February 1973, three basic agreements between Bhutan and UNDP, regarding technical assistance, special fund type assistance and OPAS assistance, were formally signed in New Delhi by the Representative of Bhutan to India on behalf of his Government and by the Resident Representative, UNDP, India, on behalf of his Headquarters. These agreements, therefore, give the legal basis for pursuing a specific and agreed programme of UNDP assistance to Bhutan.



IV. RESOURCES SITUATION

16. The Governing Council of the UNDP approved in June 1972 an IPF of \$2.5 million for Bhutan for the five year period 1 January 1972 through December 1976 (inclusive).

17. The Governing Council at its January 1973 session, set aside <sup>35</sup> million dollars to be used, under conditions prescribed by the Council, solely for special measures to assist ~~increasing the IPF of~~ the 25 least developed countries, of which Bhutan is one, for the period 1973-76. The Council also agreed that the Capital Development Fund should be used primarily ~~(2)~~ for the least developed countries.

18. It has been agreed in principle by UNDP and the GOB that projects or parts of projects suitable for financing by the Capital Development Fund (CDF) should be so financed, after of course careful review and within the limited <sup>2</sup> of funds available to Bhutan through the CDF.

19. A table indicating the quantum of assistance from UNDP for all of the project documents developed by this mission is attached as Annex IV. Since the duration proposed for some of the projects is more than 3 years, some costs of those projects, if approved, would spill over into 1977 and later, and thus not be expenditure within the 2.5 million dollar <sup>period</sup> IPF. It will be seen that the estimated cost ~~to the IPF~~ for 1973-76 for all of the project documents now submitted, if approved promptly, would be some \$3.8 million ~~(2)~~.

This of course assumes implementation of UNDP inputs on schedule, without any slippage in recruitment, fellowship placement, equipment provision, etc. It is thus clear that before all of these projects could be approved, guarantee of additional resources <sup>above the IPF of \$2,500,000</sup> ~~(see paragraphs 26, 27, and 28 above)~~ will have to be provided. If, say, one million dollars from the \$35 million <sup>for "special measures"</sup> ~~special~~ fund could be added to Bhutan's IPF, this would largely solve the financial problem. Further, of course, any of the UNDP inputs which could



be financed from the CDF, UNICEF, Regular programmes or bilateral donors, would change the picture substantially.

20. The table at Annex V indicates the estimated expenses by UNDP for the major inputs - expertise, fellowships, equipment - spread over the years 1973-76, assuming reasonably quick approval of the new projects.

21. It is hoped that when the project documents have been discussed with the participating agencies and with UNICEF, it may be possible to finance some parts of certain of these projects from Regular budget funds or UNICEF funds thus reducing the demand on the Bhutan IPF.

21A. WHO has decided in principle that its Regular Funds, under suitable conditions, might be available for assistance to Bhutan although the latter is not at present a member of the WHO.

22. The WFP has indicated a keen interest in exploring the possibility of assistance to Bhutan and it may be that WFP projects which would substantially support and bolster UNDP projects might be developed, For example, in paying part wages of workers in road construction, or in institutional feeding, etc.



V. LOGISTICS, ADMINISTRATIVE AND COST OF LIVING FACTORS

23. The mission leader had detailed discussions with the Foreign Minister on various logistical, administrative and related matters which would arise if the programme of assistance being requested by Bhutan is approved. The first draft of a post report is being prepared by the Resident Representative-India and will be circulated to UNDP and agencies well in advance of the arrival of the first expert.

24. It is clear that living costs in Bhutan will be modest and that in fact there is not a great deal over the basic essentials on which experts will wish to spend money. The currency in use in Bhutan is the Indian Rupee and all local purchases, payments etc. will be made in this currency. (with reasonable rental to be paid by the experts) Since the Government will provide furnished living quarters and local transportation, it is expected that experts would be able to make considerable savings out of their salary and allowances - subject of course to the possibility of heavy expenses at home involved in maintaining two houses, fixed charges, education of children at home etc., etc. Thus, in some cases the mandatory 25% of salary in local currency plus allowances could conceivably be more than will be expended by the expert.

25. It is quite certain that there will be no possibility of having the Bhutanese Government convert any rupees into hard currency and this should be made clear to all concerned. This may require some special consideration based on experience, of the "mandatory portions of salary" provisions.

26. The question of who should provide supporting services such as office accommodation, secretarial and typing help, transport for official purposes etc., was thoroughly discussed with it being made clear that payment for any of these charges by the UNDP would have to come out of the IPF figure. The GOB generously concluded that it would assume all these obligations.



For example, the Government would set up, at the outset, a very small pool of secretarial and typing help available to experts in Thimphu. Even where local supporting staff of non-Bhutanese nationality will have to be employed, the GOB will assume the costs.

27. As for local transportation, by far the most practical vehicle is a good jeep, perhaps 4-wheel drive, depending on the circumstances. Here again, the GOB said it would <sup>as a general rule</sup> provide each expert with such a jeep and driver at government expense. Personal cars are not practicable and their import will not normally be necessary nor is it recommended. The official jeep, however, will be at the full-time disposal of the expert, though he would be asked to pay running costs for week-end and private use.

28. The mission leader and the Minister of Foreign Affairs discussed the possibility of some UNDP representation in Bhutan. It was entirely agreed that every effort should be made to avoid a costly arrangement and that an experimental approach should be used. One possibility would be to ask a suitable expert in Thimphu, who could be thoroughly briefed in Delhi or by visits from the Delhi UNDP office, to serve also as Liaison Officer for UNDP matters. This experiment commends itself to the mission leader. Another, and perhaps complementary, arrangement would be, depending on the timing, size and flow of expertise and equipment to Bhutan, to assign from the UNDP office in Delhi an experienced senior Indian officer who could serve as Liaison Officer in Thimphu, temporarily or on a continuous basis as necessary, to assist experts in all logistical, administrative, personal financial matters etc. In principle, the GOB would agree to such an arrangement at the time thought suitable by UNDP.

(Any additional items?)



VI. ADDITIONAL AND FUTURE UN FAMILY ASSISTANCE

29. It should be recognised that the present programme of assistance which represents the needs requested by Bhutan has now reached proportions approaching or exceeding the IPF possibilities, depending on factors mentioned above in paragraph 19. The GOB and the mission agreed, however, that the best course would be to go ahead with consideration of the project documents already submitted and not suspend everything until a formal country programme, with all its trappings, could be developed. Provisionally, the team leader agreed with the GOB that the optimum time for developing a country programme would be in the period say - preceding 1 April 1976, which would be the beginning of Bhutan's fourth Five Year Development Plan. This practical approach, while avoiding a substantial delay in trying for a country programme at this stage, will also provide some substantial experience with individual projects approved and under implementation in the period 1973-75.

30. Nevertheless, there is one important area of Bhutan's development which has been almost inadvertantly omitted from the present programme - viz. the agriculture sector in which Bhutan believes and the mission leader agrees, that given more time for development of sound projects UNDP assistance could be especially useful. Thus some preliminary discussion was held about some 8 different possible projects in the agricultural sector, but at the government's request it was agreed to leave these for further study by the government and later development to the extent the IPF situation would warrant.

31. There were also a few other possible projects which might involve additional requests in the near future. For example, development of Bhutan's mineral resources which ~~have~~<sup>has</sup> been under general, but not intensive, study by the Geological Survey of India (Bhutan circle) for some 10 years and which forms part of the present development plan, might benefit from some small UNDP inputs.



Specifically, in the project exploring lead and zinc deposits, present resources will only permit Bhutan to purchase one ~~mobile~~ <sup>light-weight portable</sup> drill and the provision of 3 or 4 more, which could be well used by the Bhutanese with the Indian GSI assistance, would substantially expedite exploration tests. The cost of 3-4 drills, for example, would be something like \$20,000 and the benefit accruing to Bhutan could be marked.

WFP: The team leader, who also represents WFP, told the Bhutan Government that in principle WFP would very much like to be of assistance to the country's economic development. Bhutan would welcome such assistance in suitable cases. Two specific possibilities were discussed:

(a) Food for road construction workers' wages: Bhutan supplied a list of some 3,600 construction workers now engaged in road development - a most important infrastructure in Bhutan. At the present time food rations are provided by the GOB through an administrative arrangement already well worked out, but two factors are important. First, this provision of food costs the Bhutanese government considerable sums from their meagre resources. Second, the nutritional package should be improved, and could be with WFP assistance. While any such project will have to be worked out thoroughly and in considerable detail, it seems that an appropriate daily food ration supplied by WFP could be distributed to some 3,600 workers which would save Bhutanese government some Rs. 200,000 per annum. The GOB will give firm guarantees to use this saving for agreed, specified additional development purposes.

(b) Bhutan has a large educational programme based on the English medium and one of the problems, which is difficult both for families sending their children to school and the Government itself, is to provide solid nutritional meals in the schools.



In the preliminary discussions the Government gave us an estimate of 3,700 school students in 7 schools where WFP assistance for one or two good meals per day would be greatly appreciated and would save resources which could be earmarked for additional educational or other development purposes. Here again, details will have to be carefully worked out.

(c) Some other institutional feeding programmes - for example, vocational and polytechnic institutions, hospitals, etc. may be considered by WFP.

32. UNICEF: The Mission leader was not specifically authorised by UNICEF to explore possible UNICEF assistance to Bhutan but he did indicate to the Regional Director of UNICEF in India he would have some exploratory talks and report fully on the result. Specifically one of the project documents (see Annex III) attached, TB Control<sup>1</sup>, would provide for suitable equipment, <sup>drugs</sup> ~~vaccines~~, etc. of the sort UNICEF is supplying in programmes in other countries. Substantial collaboration by UNICEF in this project along with WHO would be a welcome contribution to the GOB and would certainly relieve the IPF picture. Secondly, UNICEF assistance in any programme developed in the field of population and family planning, which would include strengthening Maternity and Child Health services would also seem to the mission leader to be worth exploring. Thirdly, there are no doubt other areas in which UNICEF might be interested -for example, sanitary, town and village water supply, which figures in the third Development Plan, but which is slowed down by lack of resources.

33. The mission leader recommended to the GOB that it receive a representative of UNICEF for discussion on these and other possibilities, and on the last day of the mission, he was told by the government that they would welcome such a visit, preferably after the year of mourning of His Late Majesty, which ends in late July 1973 - thus, say in late August or September 1973.



34. UNFPA: The mission leader and his assistant, Mr. Paul Matthews, who looks after UNFPA business in India, had several discussions along with Dr. Prasad of WHO, with Bhutanese officials about a possible UNFPA programme of assistance to Bhutan. Preliminary discussions resulted in the drafting of a long-term programme which the GOB said they would like to consider in greater detail particularly regarding the phasing of the programme, and possibly come forward with a specific request in due course. This matter will be followed up by the Resident Representative, UNDP, India.

35. REGULAR PROGRAMMES: The mission was not specifically briefed for discussion of possible assistance to Bhutan from the Regular Programmes of UN agencies. The WHO member of the mission did, however, tell the GOB that WHO had decided in principle that Regular Programme funds could be used for assistance to Bhutan even though the latter was not a WHO member. No doubt, this question of WHO assistance - perhaps, for example, as partial financing of the TB Control project, could be followed up.

36. UNOTC: While having no specific brief, the mission leader understood UN Regular Programme funds were now available primarily (?) for least developed countries of which Bhutan is one. It has been arranged that the UN Commissioner for Technical Co-operation will be meeting the Foreign Minister of Bhutan and the Secretary of Development during the course of the ECAME meeting in Tokyo beginning 11 April 1973. It is hoped that these discussions will give some indication of possible assistance to Bhutan from ~~the~~ UN Regular Funds.

36. Bilateral donors. The Bhutanese government has received and welcomed some assistance from bilateral donors other than India, chiefly through the Colombo Plan. For example, many of Bhutanese fellowship needs are met in this way, and some useful equipment, livestock, etc. have also been received.



37. The Mission leader explained to the GOB the wishes of the Governing Council that UNDP assistance should be coordinated with that of bilateral donors, under arrangements agreeable to the recipient government concerned. The GOB agreed that appropriate bilateral donors could be informed by the mission leader of the programme of assistance now being requested by Bhutan. Offers of complementary or associated aid, especially where it would relieve the IPF, could be explored informally and provisionally.

38/ The question of investment

UNDP's arrangements for offering investment advice to recipient countries were explained by the mission leader. In appropriate cases, Bhutan would welcome such help from UNDP. One specific example could be the cement plant project (see para \_\_\_\_ and annex III), which eventually would require heavy investment in buildings and machinery, and which will have to go through some early stages including a final "bankable feasibility study" before investment decisions would be wisely made.

39. This matter will be followed up as necessary by the Resident Representative, UNDP, India.



From Annex III

Consolidation

Document of

another MR Manual

2/5/73

UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Royal Government of  
BHUTAN

Title : MECHANIZATION OF ROAD WORKS  
Number : BHU/72/009/A/01/01 Duration : Three years  
Sector : Transport and Communications  
Sub-sector : Transport by land  
Government Co- : public Works Department of Executing United Nations  
operating Agency : the Ministry of Development Agency;  
Date of : 1972 Starting  
submission : Date : May, 1972  
Government :  
contribution : Rs. 1,540,000 UNDP  
(Equivalent to US \$ 205,333) contri- : \$ 702,000  
Approved : bution

\_\_\_\_\_  
On behalf of the Government

Date : \_\_\_\_\_

\_\_\_\_\_  
On behalf of the Executing Agency

Date : \_\_\_\_\_

\_\_\_\_\_  
On behalf of the UNDP

Date : \_\_\_\_\_



## 1. BACKGROUND AND SUPPORTING INFORMATION

### A. Justification for the Project

Under the current Five Year Plan, to be completed in April 1976, the major task of the Public Works Department of the Ministry of Development is to construct new roads at the rate of some 40 kilometers yearly. The Department's further responsibilities include the maintenance of a road network totalling approximately 150 kilometers, the construction of municipal infrastructure, and the construction of miscellaneous hydraulic facilities for irrigation and water supply. It is anticipated that the Department's work load will significantly increase in the forthcoming Five Year Plan, starting in April, 1976.

The purpose of the Department's road construction programme is to connect heretofore isolated communities with the existing road network, thereby enabling development in all economic and social fields. The nature of the work is such that small construction projects averaging 5 to 10 kilometers in length are distributed throughout the entire country. Based on careful studies of future expansion requirements and of transport and maintenance economy, the government adopted relatively high standards for the construction programme. Design speeds are set for an average of 40 km per hour. <sup>All</sup> roads are to be hard-surfaced.

Owing to the country's exceptionally severe topographic constraints, optimum economy in road construction requires a blend of mechanization and labour-intensive methods. The use of equipment is particularly essential for three specific operations :

- a) Deep formation cutting where large quantities of earth cannot be excavated and transported by hand;
- b) Rock excavation where large quantities of drilling are required for blasting; and
- c) Compaction of road materials to high densities as required to support modern vehicular traffic.



Significantly, the Department's programme is aimed at roads for rural development. The construction of primary arterials is nearing completion under bilateral assistance from India. Maintenance of the primary network is now assured by the Indian Border Roads organization under arrangements which will continue for the foreseeable future. Page 3

In addition to considerations of construction economy, the use of equipment for road building is imperative by virtue of the country's scarcity of labour. It is to be recalled in this connexion that the quasi-totality of the labour force for the Department's work is being imported to the country from neighbouring areas.

The project, comprising an input of equipment and expertise from the UNDP, together with facilities for equipment operation, servicing, and repairs from the government, is viewed as the means to introduce sound mechanization practices and accelerate road construction during the country's current Five Year Plan. It is anticipated that such practices will be firmly established at the end of the project in 1976, and that the implementation of an expanded road construction programme under a subsequent development phase will be made possible.

#### B. Institutional framework

The project will be carried out within the institutional framework of the public works Department under the Ministry of Development.

The budget available to the Department for road construction, <sup>and maintenance</sup> is of the order of US \$ 2.0 million yearly. This is deemed to be sufficient for carrying out the envisaged road construction programme including the mechanization project as an integral part thereof.

In regard to personnel, the government now has at its disposal the required administrative and technical staff and the labour for undertaking the programme. Operators and mechanics to handle an expanded equipment pool are available.

In regard to facilities, the Department has at its disposal 3 existing mechanical shops at key locations in the country. These shops are to be strengthened with tools and spare parts, and they are to be supplemented by mobile service units from the project. Major equipment repairs, as opposed to service, are to be carried out at workshops operated under the Ministry of Finance.

The sufficiency of the Department's organization for undertaking the mechanization project was ascertained in March 1973 by a Technical Advisor of the United Nations.



C. provision for government following

It is anticipated that upon completion of the project, the public works Department will have successfully introduced mechanization for its road construction programmes, including such aspects as staff, organization, methods, and equipment servicing procedures. The Department will also be in possession of operational road working equipment from the project. These will constitute the nucleus of an expanded road construction <sup>and maintenance</sup> programme for the following Five Year Plan.

D. other related activities

It is significant that the government <sup>is expecting to</sup> (will) receive UNDP assistance under project BHU/72/005, where expertise, training and provisions of equipment will be used to strengthen the workshops of the Ministry of Finance. Whereas servicing of road-building machinery under project BHU/72/009 will be assured through the public works Department, the workshops of the Ministry of Finance are counted upon, inter alia, for major repairs of this machinery. Project BHU/72/005 is viewed in this connection as a complement of project BHU/72/009.

E. future UNDP assistance

UNDP assistance may be required at a future date, both in mechanization of road construction, and in road planning and execution. The nature of such assistance cannot, however, be defined at this time.



## II. OBJECTIVES OF THE PROJECT

*There is as yet no Country Programme for Bhutan.*  
Long term objectives

The long-term objectives of the project are to enable the public works Department accelerate and improve its current road construction programme and to undertake an expanded programme in the forthcoming Five Year Plan, starting in 1976. The establishment of an optimum balance between the utilization of labour and of construction machinery required in this connection.

### Immediate objectives

The immediate objectives of the project are to introduce mechanization for certain road construction activities of the Public Works Department, in accordance with the following sequence :

- a) Selection of equipment and of corresponding spare parts and tools to satisfy job requirements and prevailing constraints.
- b) Procurement of such equipment, spare parts and tools.
- c) Preparation of schedules and specification of procedures for equipment maintenance, servicing and repairs.
- d) Utilization of equipment under actual, on the job conditions, including maintenance, servicing and repairs.



III. WORK PLANA. Description of project activities

1. Preparatory activities to be carried out by the Government to ensure the timely implementation of the project :

None required.

2. Activities to be undertaken during the project

<u>Project activities</u>	<u>Location</u>	<u>Proposed duration and starting date</u>
Preparation of job descriptions	New York	1 week, 1 May 1973
Approval of job descriptions by the Government	Thimphu	2 weeks, 15 May 1973
Recruitment of equipment expert	New York	1 month, 1 June '73
Field assignment of equipment expert and preparation of equipment purchase orders	As required	6 weeks, 1 July '73
Procurement and delivery of equipment	-do-	12 months, 1 Aug 1973
Recruitment of maintenance and service expert	New York	6 months, 1 Feb 1974
Field assignment of maintenance and service expert	Thimphu	6 months 1 Aug 1974
Road construction	As required	21 months 1 Aug 1974
Recruitment of expert in mechanization.	New York	2 months, 1 Jan 1976
Final project review and preparation of recommendations for mechanization of road construction during Fourth Five Year Plan	Thimphu	2 months, 1 March 1976

B. Description of UNDP inputs

1. Assignment of international staff

a) Equipment expert ; Starting date : 1 July, 1973

Duration of assignment : 6 weeks

Following initial briefing by the Executing Agency, the expert shall visit equipment manufactures as required and assemble documentation in regard to equipment characteristics,



costs, delivery times, and equipment maintenance and service requirements. He shall then proceed to Thimphu and, working in close collaboration with officers of the public works Department, he shall prepare purchase orders for equipment, spare parts and tools, taking due account of particular job requirements and constraints in mechanized road construction operations in Bhutan.

b) Maintenance and Service expert : Starting date :  
1 August, 1974

Duration of assignment : 6 months

The expert shall be assigned to Thimphu and he shall travel throughout the country as necessary. His function shall be to establish schedules and to specify and introduce procedures for the maintenance and servicing of project equipment. He shall furthermore advise the public works Department in regard to the training of personnel for maintenance and service operations, and he shall initiate on-the-job training of equipment operators and mechanics in connection with machinery delivered under the project, emphasizing such procedures as may be new to counterpart personnel.

c) Expert in mechanization : Starting date : 1 March, 1976  
Duration of assignment : 2 months

The expert shall be assigned in Thimphu where he shall work in close collaboration with officers of the public works Department. He shall review the findings of the project in regard to mechanization of road construction and, drawing on such findings, he shall prepare recommendations for the mechanization of an expanded road construction programme during the country's fourth Five Year Plan. Recommendations shall include the preparation of a schedule for further equipment procurement in function of anticipated needs as well as the outline of a programme for training and operation.



2. provision of subcontractual services

Not applicable.

3. Training provisions

Not applicable.

4. UNDP provided supplies and equipmenta) Non-expendable equipment

<u>Item</u>	<u>Quantity</u>	<u>Delivery date</u>	<u>Cost ( US \$ )</u>
Bulldozer, 200 HP	10	1 Aug 74 or earlier	320,000
Road roller, 8-10 T	6	-do-	88,000
Portable rock-drill	100	-do-	100,000
Low-bed transporter	2	-do-	26,000
Mobile service unit	2	-do-	26,000
			<u>560,000</u>

b) Expendable equipment

<u>Item</u>	<u>Quantity</u>	<u>Delivery date</u>	<u>Cost ( U. S. \$ )</u>
Spare parts for non-expendable equipment	As reqd. for 3 years	1 August 1974 or earlier	181,000
Special tools for non-expendable equipment	As required	-do-	12,000
Kits, mechanic's tools	5	-do-	5,250
			<u>198,250</u>

c) Miscellaneous

Not applicable.

C. Description of Government inputs1. pre-requisite activities

Not applicable.

2. Assignment of national staff

a) The Chief Engineer : acting as necessary through staff of the public works Department, shall assure the timely and effective prosecution of the project on behalf of the



government as well as the co-ordination of activities with international experts.

b) Equipment operators, mechanics, assistants, labourers and other non-professional personnel shall be provided by the Public Works Department, starting at the time of delivery of equipment, and continuing until the project's conclusion. The requirements and status of non-professional personnel are as follows :-

<u>Category</u>	<u>Project Requirement</u>	<u>Presently available for project</u>	<u>To be recruited</u>
Equipment operator	25	10	15
Service mechanic	6	6	-
Assistant Mechanic	18	6	12
Store-keeper	4	4	-
Clerk	10	2	8
Driver	10	-	10
Labourer, guard, etc.	100	100	-

### 3. Government provided supplies, equipment and buildings

#### a) Non-expendable equipment and buildings

<u>Item</u>	<u>Quantity</u>	<u>Delivery date</u>	<u>Cost (Rs.)</u>
Existing P.W.D. Mechanical workshops	3	1 Aug 1974 or earlier	150,000
Temporary equipment sheds	As reqd.	-do-	100,000
Service vehicles	-do-	-do-	30,000

#### b) Expendable equipment and supplies

<u>Item</u>	<u>Quantity</u>	<u>Delivery date</u>	<u>Cost (Rs.)</u>
Fuel and lubricants for operation of eqpt.	As reqd.	1 Aug 1974 or earlier	760,000
Miscellaneous equipment and supplies	-do-	-do-	100,000



Project Budget covering UNDP Contribution

( In US Dollars )

Country : Bhutan  
 Project No. : BHU/72/009/A/01/01  
 Title : Mechanization of Road Works

	Total m/m \$	1973 m/m \$	1974 m/m \$	1975 m/m \$	1976 m/m \$
10. <u>PROJECT PERSONNEL</u>					
11. <u>Experts</u>					
11.01 Equipment Rx Expert	1½ 3,750	1½ 3,750			
11.02 Maintenance and service expert	6 15,000		5 12,500	1 2,500	
11.03 Mechanization expert	2 5,000				2 5,000
19. <u>COMPONENT TOTAL</u>	9½ 23,750	1½ 3,750	5 12,500	1 2,500	2 5,000
40. <u>EQUIPMENT</u>					
41. Expendable Equipment	198,250	38,250	160,000		
42. Non-expendable Eqpt.	560,000	100,000	460,000		
49. Component Total	758,250	138,250	620,000		
99. GRAND TOTAL	782,000	142,000	632,500	2,500	5,000



Project Budget Covering Government Counterpart  
Contribution in kind

Country : Bhutan

Project Number :

Title :

<u>Total</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
m/m Rs.	m/m Rs.	m/m Rs.	m/m Rs.	m/m Rs.

10. PROJECT PERSONNEL

Technical Personnel	25	100,000	5	20,000	12	48,000	3	12,000	5	20,000
---------------------	----	---------	---	--------	----	--------	---	--------	---	--------

Non-Technical Personnel	200	300,000	-		50	75,000	120	180,000	30	45,000
-------------------------	-----	---------	---	--	----	--------	-----	---------	----	--------

19. Component Total	225	400,000	5	20,000	62	123,000	123	192,000	35	65,000
---------------------	-----	---------	---	--------	----	---------	-----	---------	----	--------

40. EQUIPMENT

41. Expendable Equipment	100,000	-		25,000	60,000	15,000
--------------------------	---------	---	--	--------	--------	--------

42. Non-expendable Equipment	180,000	-		45,000	108,000	27,000
------------------------------	---------	---	--	--------	---------	--------

43. Premises	100,000	-		25,000	60,000	15,000
--------------	---------	---	--	--------	--------	--------

49. Component Total	380,000	-		95,000	228,000	57,000
---------------------	---------	---	--	--------	---------	--------

50. MISCELLANEOUS

51. Operation and Maintenance of equipment	760,000	-		190,000	456,000	114,000
--	---------	---	--	---------	---------	---------

53. Sundry	-	-		-	-	-
------------	---	---	--	---	---	---

59. Component Total	760,000	-		190,000	456,000	114,000
---------------------	---------	---	--	---------	---------	---------

99. GRAND TOTAL	1,540,000	20,000		408,000	876,000	236,000
-----------------	-----------	--------	--	---------	---------	---------



Draft

## Annex IV

No.	TITLE	Misc.	Duration	Experts		Fellowships		Equipment	Total
				m/m	\$	m/m	\$		
BHU/72/002	Forestry	-	2 Yrs.	3/30	75,000	3/12	6,400	75,000	156,400
003	Deothang	4,500	3 "	2/13	32,500	-	-	123,000	160,000
004	Teachers Dev.	3,800	1 "	5/49	122,500	4/26	115,700	108,000	250,000
005	Auto workshops	10,000	2 4 "	2/26	65,000	11/60	40,000	208,800 <sup>a</sup>	323,800 <sup>a</sup>
006	Health Services	-	5 "	1/12	30,000	-	-	1,044,560	1,074,560 <sup>a</sup>
007	Cement Plant								
008	Press	22,500	1 "	2/6	15,000	-	-	62,500	100,000
009	Road works	-	3 "	3/9 1/2	23,750	-	-	758,250	782,000
010	Sheep & Yek	31,000	4 "	5/88	220,000	5/38	21,400	187,600	460,000 <sup>a</sup>
011	Wireless	14,390	1 "	1/4	10,000	2/4	2,200	100,220	126,810
BHU/73/001	Postal Services	-	3 "	-	-	16/67	46,150	7,000	53,150
002	Don Bosco	4,500	3 "	2/13	32,500	-	-	153,000	190,000
003	LT Link <sup>c</sup>	18,000 <sup>d</sup>	26 months	1/9	22,500	3/36	16,400	253,750	310,650
004	Telephones	-	28 "	-	-	-	-	338,000 <sup>e</sup>	338,000
TOTAL		88,690			647,750		149,250	3,434,680	4,320,370

a : Non-Indian component \$ 64,800  
 Indian component 144,000

b : Extends beyond IPF period (1976)

c : 2/4 m/m in subcontract, \$ 12,000

d : Misc. work  
 6,000  
 18,000

e : Subcontract to ITI Bangalore including some personnel services



# Draft Annex V

TITLE OF PROJECT			1973	1974	1975	1976	1977
BHU/72/002 Forestry	FAO		15,000	110,000	31,400	-	-
003 Voc. Trg. Deothang	ILO		3,000	108,500	48,500	-	-
004 Teachers' Dev'tment	UNESCO		1,450	248,550	-	-	-
005 Auto workshops	UN IDO		-	99,850	103,950	60,000	60,000
006 Health Services (Tol)	WHO		-	328,960	188,400	188,400	188,400*
007 Cement Plant, Para	UN IDO		-	-	-	-	-
008 Press, Thiephu	UNESCO		-	100,000	-	-	-
009 Road machinery	UN		142,000	632,500	2,500	5,000	-
010 Sheep & Yak Dev.	FAO		-	237,300	111,700	68,000	43,000
011 Wireless	ITU		27,500	124,310	-	-	-
BHU/73/001 Postal Services	UPU		14,650	16,900	21,600	-	-
002 Voc. Trg. Don Bosco	ILO		3,000	168,500	18,500	-	-
† <u>GRAND TOTAL</u>			190,100	2,372,970	961,100	321,400	291,400
Of which IPF : \$ 3,840,570							
†003 Lateral Telecom Link	ITU		8,500	13,600	288,550	-	-
** 004 Telephone Exchanges	ITU		-	192,000	146,000	-	-

\* \$ 188,400 for 1978

\*\* Rupee contribution converted at Rs.7.6 = US \$ 1