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ANNUAL PLAN — 1972-73
OF
BHUTAN



REPORT OF THE TECHNICAL TEAM

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GOVERNMENT OF INDIA
PLANNING COMMISSION

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A N N U A L P L A N O F B H U T A N

1972-73

REPORT OF THE TECHNICAL TEAM

GOVERNMENT OF INDIA

PLANNING COMMISSION

MAY, 1972



SUMMARY OF CONTENTS |

		<u>Pages</u>
<u>CHAPTER I</u>	Introduction	1
<u>CHAPTER II</u>	Annual Plan 1972-73	12
<u>CHAPTER III</u>	Financial Resources for Annual Plan 1972-73	23
<u>CHAPTER IV</u>	Agricultural Programmes	30
<u>CHAPTER V</u>	Animal Husbandry including Pisciculture	48
<u>CHAPTER VI</u>	Power	69
<u>CHAPTER VII</u>	Industry & Mining	71
<u>CHAPTER VIII</u>	Transport & Communications	89
<u>CHAPTER IX</u>	Social Services	99
<u>CHAPTER X</u>	Miscellaneous	105

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PLANNING COMMISSION

CHAPTER I

INTRODUCTION

The Ministry of External Affairs requested the Planning Commission to depute a Technical Team to visit Bhutan for finalization of the Bhutan's Annual Plan 1972-73. Accordingly, the Planning Commission constituted a Team consisting of the following officials:

1. Shri A. Mitra,
Secretary Planning Commission,
New Delhi. ... Leader
2. Shri P.P. Agarwal,
Adviser, Programme Administration
Planning Commission ... Alternate
Leader
3. Dr. P.S. Bhatnagar,
Director Rice Research
Institute, Patna. ... Member
4. Shri J.S. Srivastava,
Joint Director Animal
Husbandry,
Planning Commission ... Member
5. Shri N.N. Agarwal,
Joint Director,
Industry and Minerals Division,
Planning Commission ... Member
6. Shri K.D. Kale,
Deputy Divisional Manager,
(Planning),
India Tourism Development
Corporation ... Member
7. Shri D.R. Gupta,
Joint Director,
Programme Administration
Division,
Planning Commission ... Member
8. Shri V.V. Kumar,
Director, Hydel Projects,
C.W. & P.C. posted at
Phuntsholing ... Member

The representatives of the Ministries of External Affairs and Finance who were included in the Team could not visit Bhutan due to pre-occupation under pressing work in New Delhi. Shri K.M. Balasubramanian, Senior Research Officer, Programme Administration Division, Planning Commission assisted in the work of the Team.

1.2 The main terms of reference of the Team were to examine the draft proposals prepared by the Royal Government of Bhutan for the Annual Plan 1972-73 in the light of the progress made in 1971-72, in relation to its Third Five Year Plan and to make recommendations regarding the size and content of the Annual Plan, 1972-73, the inter-sectoral priorities and the manner of financing the Plan outlays as recommended by the Team.

1.3 The Team left Gangtok on April 23, 1972 and reached Phuntsholing, the border town of Bhutan in the afternoon of the same day. The Team reached Thimpu at 4.30 P.M. on the following day (April 24, 1972); On arrival at Thimpu, the Team met the Representative of the Government of India in Bhutan. The Leader and the Alternate Leader called on His Majesty the King in his Palace at 8.00 A.M. on April 26, 1972.

1.4 The formal discussion with the Government of Bhutan commenced in a meeting of the Planning Committee of Bhutan held in the Banquet Hall at 9.30 A.M. This

was presided over by His Royal Highness the Crown Prince of Bhutan and was attended by His Majesty's representatives in the Ministries of Development & Finance, the Royal Highnesses, Honourable Ministers of Industry, Trade, Forests, Finance, Development and other senior officers of the Government of Bhutan. Welcoming the Planning Commission Team, His Royal Highness the Crown Prince who is the Chairman of the Bhutan's Planning Committee expressed appreciation of the generous aid given by the Government of India for the economic and social development of Bhutan. He expressed the hope that the ties between the two countries will be further strengthened as a result of the visit of this Team and that the ensuing discussions between the Planning Commission Team and the Government of Bhutan officials would prove fruitful and rewarding.

1.5 The Leader of the Team expressed his gratefulness to the Royal Government of Bhutan for welcoming the Team which was very happy to be in the capital of the country to finalize Bhutan's Annual Plan 1972-73. He also conveyed the greetings of the Prime Minister of India who is the Chairman of the Planning Commission and the Minister for Planning to the Planning Committee of Bhutan. It was a matter of great pleasure for him to visit Bhutan and thus fulfil a long cherished dream of seeing the scenic beauty of this great country.

He looked forward to a very fruitful exchange of ideas which would speed up the planned economic development in Bhutan. The Team, he added, was at the disposal of the Government of Bhutan and would welcome the discussion as per programme most convenient to them.

In the discussion that followed, the Honourable Minister of Development made the following observations:

- (i) The distinguished Team of the Planning Commission while reviewing the progress of the Annual Plan 1971-72 might keep in view the special circumstances obtainable in that year e.g. international military conflict on the sub-continent, shortage of technical personnel and key material and their regular flow of funds.
- (ii) There should be close coordination in the utilization of international assistance for development of Bhutan to avoid duplication and unhealthy competition among various countries.
- (iii) Royal Government of Bhutan is very keen to take up the Chukka Hydral Project as soon as possible in order to generate resources to meet the increasing commitment of economic and social development in Bhutan. In the recent discussions with him, the Government of Bangla Desh expressed keen desire to have participation with Government of Bhutan in the benefits from such projects. In view

of this, the possibility of fruitful cooperation between Bangladesh, Bhutan and India in the development of irrigation and power potential and inter-state Flood control arrangements may be explored.

(iv) The Government of Bhutan was very grateful for the generous assistance provided by the Government of India for promoting development in this country. With this aid considerable stride has been made in the various fields like Agriculture, Communications, Education and Health. Bhutan is on the verge of green revolution and some of the areas in Bhutan were surplus in foodgrains and it was possible to export fruits to India. A fine network of roads has been created in Bhutan.

L.6 Referring to the suggestions made by the Honourable Development Minister, the Alternate Leader, Shri Agarwal pointed out that these suggestions will be fully kept in view by the Team in the ensuing discussions. He also suggested a few points for the consideration of the Planning Committee of Bhutan.

(i) Master Plans for the development of growing towns of Thimpu and Phuntsholing and other urban areas may be prepared without loss of time.

(ii) Special lectures may be arranged to the Bhutanese nationals who enter the Government service after the completion of their matriculation so as to equip them with the latest developments about their country and abroad.

(iii) The technical officers of Bhutan may be sent to India for suitable training.

(iv) For proper and adequate planning, it was very essential to collect basic statistical data in regard to the economy of Bhutan.

(v) Attention may be paid to improve sanitation and other amenities in rural housing without disturbing their tradition, designs and structure.

(vi) Special attention may also be paid to build up the health of the children who constitute the future of the nation.

1.7 The Honourable Minister for Development appreciated the suggestions made by the Alternate Leader, Shri Agarwal and agreed to have them carefully examined and implemented as far as possible. He desired that the Planning Commission might assist the Government of Bhutan in procuring the services of a Town Planning expert. The Honourable Minister of Trade and Industry and Forests referred to the revised proposals under

Industry which had been prepared recently and circulated in the meeting and suggested that the Team should give consideration to them both for the Annual Plan 1972-73 and the Third Five Year Plan. These revisions, he added, were necessitated as at the time of the formulation of the Third Five Year Plan, all the relevant factors were not known and thus the requirements of this sector could not be fully reflected either in the draft proposals or in the recommendations of the earlier Technical Team of the Planning Commission.

1.8 Honourable Development Minister briefly explained the main functions of the Planning Committee e.g. review of the progress of the Annual Plan, periodical assessment of the progress of individual schemes and projects included in the Annual Plan, re-allocation of funds from one sector to the other, modification in the sectoral priorities, inclusion of the new schemes in the five year/annual plan etc. This was an Advisory Body which is yet to start its work with right earnestness.

1.9 In regard to the suggestion regarding Family Planning Programme, he added that the country was under-populated. There was no unemployment in the country. In fact there was shortage of man-power, even then the need for family planning was being felt among the families of Bhutan officers who should be provided such facilities.

1.10 The other points which were raised in this meeting are briefly indicated below:

- (i) Adequate provision should be made in the Bhutan Plan for development of industry and steps should be taken to remove various bottlenecks e.g. shortage of technical personnel, key material etc.
- (ii) A third technical school in Central Bhutan should be opened to meet the problem of technical personnel.
- (iii) The provision of setting up of three new telephone exchanges will be higher than what was provided in the Third Plan of Bhutan and thus there has been a need for increasing this provision as well as the provision for expansion of existing telephone exchanges at Thimpu, Paro and Phuntsholing.
- (iv) A good programme for development of Tourism should be implemented in Bhutan.

1.11 Secretary, in his concluding remarks conveyed his happiness on the excellent use made of the development funds provided by the Government of India and suggested that the concept of the Annual Planning should be pursued by the Government of Bhutan. He assured the Planning Committee that the Technical Team would carefully consider all the suggestions which

emerged in these meetings and would make suitable recommendations to the Government of India specially in regard to:

- (i) regular release of funds;
- (ii) conversion of loan component into grant component of the Development Aid;
- (iii) The timely availability of the key material from India like Cement, Steel etc.

He would also convey to the Government of India the desire of the Government of Bhutan and of Bangladesh conveyed through the Government of Bhutan for close cooperation between the three countries in the development of irrigation and power potential, flood control measures etc.

1.12 The meeting of the Planning Committee was immediately followed by the discussion by the Team with their counterparts of the Royal Government of Bhutan on the Annual Plan 1972-73 Plan proposals on relevant sectors of development. The discussion on the financial resources position of Government of Bhutan was held with the Alternate Leader in the chamber of Honourable Finance Minister when the Financial Adviser in the Ministry of Finance, Shri D.R. Gupta, Member of the Technical Team were also present. These discussions were concluded in the afternoon of April 26, 1972 and the results of the discussion were brought up in the general meeting held in the Banquet Hall at 4.30 P.M. on the same day.

1.13 The Leader of the Team briefly mentioned a few significant points which emerged in the two days' discussions and made a number of specific suggestions regarding development of Agriculture, Industry and Tourism in Bhutan, need for making Planning Department as an effective organization to coordinate the departmental Plans, creation of a consolidated fund of the State, desirability of creating a unified agency for the preparation and implementation of the scheme for Capital Project etc. These points have been set out in detail in the relevant sections of this report. The Alternate Leader briefly referred to the overall size of the Annual Plan 1972-73 which emerged in the discussions. He also referred to the difficulties experienced in collecting the expenditure figures for the Annual Plan 1972-73 and suggested that suitable arrangement should be made by the Royal Government of Bhutan for this purpose. He expressed thanks to his Royal Highness for kind consideration shown to the Team and the patient manner which the officials of the Royal Government of Bhutan devoted their time in the discussion with the Technical Team. Concluding the discussions, His Royal Highness the Crown Prince thanked on behalf of the Royal Government of Bhutan the Team for their cooperation and efforts made during the last two days and expressed the hope that the Technical Team would visit the country again.

1.14 The recommendations made in this report are unanimous. These are based on the detailed discussions with the Honourable Ministers and senior officials of the Royal Government of Bhutan in the light of the assessment of the progress recorded in 1971-72 and the impression various Members of the Team gathered from the visits of a few on-going selected projects/programmes in Bhutan. It is hoped that the Annual Plan 1972-73 as recommended by the Team, if implemented efficiently and according to schedule would further strengthen the economy of the country.

1.15 The Team would like to express its gratitude to the Government of Bhutan and their officials for the cooperation given to the Team in the detailed discussion and for their warm hospitality extended to them. The Team would also wish to accord their appreciation for the cooperation received from the Ministry of External Affairs and the representative of the Government of India in Bhutan and the staff.

CHAPTER II

ANNUAL PLAN - 1972-73 - BHUTAN

-72 Plan

Against the approved Third Plan outlay of Rs.35.5 crores, about Rs.6.9 crores was approved for the year 1971-72. According to the revised estimates furnished in November, 1971, the expenditure in 1971-72 was reported at Rs.7.03 crores. The figures of likely actual expenditure for 1971-72 were not easily available for all the heads of development. The Planning Department furnished at the time of the closing Session, figures of likely expenditure in 1971-72. The Plan expenditure according to these estimates in 1971-72 was of the order of Rs.6.24 crores (sector-wise distribution shown in col. 4) including a payment of Rs. 58 lakhs made to the Border Roads Organisation for Tshal-emphe-Wangdriphodrang motorable road for which the provision was included in Annual Plan 1971-72. The shortfall in Plan expenditure has occurred mainly under Agricultural Programmes (excluding Forest, Co-operation and General Education) on account of non-availability of key material and technical personnel. There has been excess of expenditure under Roads and Thimpu Capital Project.

1972-73
Plan Proposals

2.2 A comprehensive and detailed document on the Draft Annual Plan proposals for the Government of Bhutan was not received from the Planning Department. According to the Budget Estimates, received from the External Affairs Ministry some time in November, 1971,

the proposals for 1972-73 Annual Plan amounted to Rs.730.11 lakhs. Details by sectors are indicated in col. 5 of Statement I (enclosed). In the discussion with the Team, a few Departments suggested modified proposals for consideration, e.g., Power, Industry, Roads etc. As indicated in the introductory chapter, Hon'ble Minister for Industry, Trade and Forest desired the revised proposals not only for the year 1972-73 but for the entire Third Plan period prepared by his Ministry to be considered by the Team.

2.3 After detailed discussions with the officials of the Government of Bhutan, the Team recommends an outlay of Rs.681.5 lakhs for 1972-73 for schemes included in the Third Five Year Plan. This does not include provision for two schemes, namely, Cement Factory at Pagli and setting up of Mineral Development Corporation in Bhutan. For these schemes, no provision was made in the Third Five Year Plan or Annual Plan 1971-72 for Bhutan. The Ministry of External Affairs, Government of India indicated to the Team that the Government of India has accepted in principle the proposals of His Majesty's Government under consideration separately for strengthening up of a Cement Factory at Pagli and Mineral Development Corporation. Pending agreement between the two Governments regarding nature and extent of the participation by these two Governments in their financing and execution etc., Ministry of

External Affairs desired that a provision of Rs. 30 lakhs might be included in the Annual Plan of Bhutan for starting preliminary works on these two schemes. This brings the recommended outlay for the Annual Plan of Bhutan for 1972-73 to Rs. 711.5 lakhs. The sectoral distribution of the outlay of Rs. 711.5 lakhs is shown in the last col. of Statement I (enclosed). The table below indicates the summary position:

(Rs. Lakhs)

Major Heads of Development	1971-72		1972-73	
	Recomm- ended	Likely actual expenditure	Pro- posed by Govt. of Bhutan	Recomm- ended by the Team
Agricultural Programmes including Cooperation.	157.80	104.86	159.16	155.80
Power	53.00	52.78	49.00	62.50
Industry and Mining	30.00	28.48	32.96	77.50
Transport and Communication	184.50	222.68	196.35	152.50
Social Services	209.26	149.00	222.23	194.50
Miscellaneous	55.94	66.32	70.41	68.70
Total:	690.50	624.12	730.11	711.50

2.4 Details of the recommendations under various heads of development, e.g., outlay by individual schemes, important physical targets to be achieved in 1972-73 etc. are set out in various sections of this report. The outlay recommended for 1972-73 is about 25% higher than the likely Actual expenditure for 1971-72. A number of measures will have to be adopted to achieve the financial and physical targets set out in this report, e.g., timely supply of key material, appointment of technical personnel, completion of building programme for various schemes etc.

Buildings

2.5 A substantial expenditure will be incurred on buildings under different heads of development in 1972-73. Details of the building programme should be worked out by the Planning Department in consultation with the Development Departments concerned within the outlays recommended by the Team for various heads of development and appropriate measures may be adopted to complete these buildings in time, e.g., strengthening of the Technical Organization, procurement of materials etc. As recommended in the Report of the Technical Team on the Third Five Year Plan, it is desirable to undertake a phased programme of construction of buildings and to have a proper scrutiny of designs and specifications in order to keep the cost to the minimum and to observe strictly spirit of austerity in this regard.

Technical Personnel

2.6 As indicated above, one of the main factors responsible for shortfall in Plan expenditure is 1971-72 and which will be a severe constraint on the further acceleration of the tempo of development in Bhutan is non-availability of Technical Personnel. The Departments which are suffering are Agriculture and Animal Husbandry even though the problem affects other Departments also. A list of the immediate requirements of personnel as furnished to the Team by the Government of Bhutan is enclosed (Appendix A). The Ministry of External Affairs will no doubt take

~~urgent action in consultation with the administrative~~
Ministries concerned to select and depute the required technical personnel at a very early date. The Team also would like to suggest that not only the required technical personnel should be selected quickly, the selection should be confined to very competent and able persons who are imbued with a missionary zeal to work in Bhutan so that the pace of the development of the Bhutan's economy is accelerated and friendly relations between the two countries further strengthened.

Supply of Key
Material

2.7 Another important factor for slow progress of the Bhutan Plan so far has been the absence of timely availability of key materials like cement, steel, G. Sheets, G.I. Pipes etc. The Government of Bhutan depend on India for the procurement of these materials. It is understood that Bhutan has to place orders in India for these materials and after quota has been allocated to them in respect of various items, the manufacturers do not release them on a priority basis. They have to stand in queue along with other indentors in India. As a result, there is considerable delay in the procurement and transport of these materials in these areas. In many cases by the time these materials reach, the proper places in Bhutan, the working season is over leading to the shortfalls in Plan expenditure. The stocks thus remain idle for some time

and are used in the next season. This is a serious problem and deserves urgent attention. It is suggested that the requirements of these areas should be met on a priority basis and these requirements should be met as soon as intimation is received from the Government concerned. The Royal Government of Bhutan have agreed to make an estimate in advance of the requirements of these materials in the beginning of the year and place orders in India as soon as possible. It is suggested that a Coordination Committee may be set up in the Ministry of External Affairs to ensure a timely release and despatch of these materials to the respective territories. This Committee may consist of the representatives of Ministry of Industrial Development, Steel and Railways. This Committee may meet frequently to discuss the problem of supply of raw material. The representatives of Government of Bhutan will be glad to present in these meetings to have this problem sorted out.

Planning Procedure 2.8 Government of Bhutan welcomed the concept of Annual Planning which also includes the periodical review of the progress of Plan schemes/projects. A Planning Committee has been set up in Bhutan with His Royal Highness the Crown Prince as Chairman and it has 14 Members including His Majesty the King. The constitution of the Planning Committee is shown in

Appendix B. The functions of the Planning Committee have not been formally defined but a step has been taken in the right direction towards integrated planning. Some indication was given about this to the Team as mentioned in the introductory chapter. At present, the Planning Department in Bhutan is not fully entrusted with the task of preparing a consolidated Annual Plan and periodical review to assess the progress of Plan schemes/projects. It is suggested that suitable arrangements may be made without any delay so that the Planning Committee could be serviced effectively. It is further suggested that the Planning Department should be fully authorised to undertake this work relating to Plan formulation and watching the progress of the Plan implementation.

STATEMENT I

1972-73 - ANNUAL PLAN BHUTAN

(Rs. in Lakhs)

Head of Development	Total	1971-72	1971-72	1972-73	
	Plan Provi- sion 1971-75	Recom- mended	Antici- pated	Proposed by Bhutan Govt.	Recom- mended
1. Agricultural Production	368.98	73.09	54.08	71.80	86.00
2. Minor Irrigation	100.00	12.66		12.17	
3. Soil Conservation	25.00	5.00		0.91	
4. Animal Husbandry	125.00	35.00	27.03	33.73	
5. Forests	160.00	25.00	23.75	33.75	
I. Agricultural Programmes (1 to 5)	778.98	150.75	104.86	156.36	152.00
II. Cooperation	18.02	7.05		2.80	2.80
III. POWER	248.00	53.00	52.78	49.00	62.50
6. Large & medium Industries	43.33	11.55		4.00	31.50
7. Mineral Development	3.00	0.20		-	3.00
8. Village & Small Industries	117.02	18.25		28.96	41.00
IV. Industry & Mining	163.35	20.00	28.43	32.96**	77.50
9. Roads	691.00	147.50	190.56	146.00	110.00
10. Road Transport	69.00	12.00	12.00	12.00	10.00
11. Post & Telegraphs	130.00	22.00	20.12	28.35	24.5
12. Tourism	17.00	3.00		10.00	6.0
V. Transport & Communication	907.00	184.50	222.68	196.35	152.5
13. General Education	633.00	106.75	86.93	124.06	105.00
14. Technical Education	87.50	25.00		20.00	20.00
15. Health	286.00	61.81	58.49	59.17	57.50
16. Water Supply & Sanitation	59.00	11.70		19.00	10.00
17. Urban Development	20.00	4.00	3.58	-	2.00
VI. Social Services	1085.50	209.26	149.00	222.23	194.50
18. Publicity	27.00	5.00	3.33	9.47	8.76
19. Statistics	5.00	0.69	0.22	1.53	1.53
20. Ministry of Development (Headquarters)	100.00	19.50	19.74	20.41	20.41
21. Capital Project*	200.00	27.50	38.55	36.00	35.00
22. Protection & Preservation of Ancient Monuments	15.00	3.00	2.85	3.00	3.00
VII. Miscellaneous	347.00	55.69	64.69	70.41	68.70
Total	3547.85	690.25	622.49	730.11	711.50
Planning Cell in the Office of Representative of India in Bhutan	2.15	0.25	1.63	-	-
Grand Total	3550.00	690.50	624.12	730.11	711.50

* Rs 50 lakhs is for internal roads in Thimphu township.

** Revised outlay of Rs. 103.08 lakhs was proposed during discussions.

CONSOLIDATED STATEMENT SHOWING THE
REQUIREMENT OF STAFF ON DEPUTATION
FROM INDIA

Category of Officer	No. of posts	Scale in Bhutan	Ref. made to Rep. of India
<u>AGRICULTURE DEPARTMENT</u>			
Horticulturist, Thimphu	1	750-1250	FA/Genl/106(A)/3122 dated 30.7.71
Vegetable Specialist, Thimphu	1	750-1250	-do-
Potato Development Officer, Thimphu	1	750-1250	-do-
Agronomist, Thimphu	1	750-1250	-do-
Economic Botanist	1	750-1250	-do-
Dy/Assistant Registrar Co-operative Societies	1	750-1250	FA/Genl/106(A)/4616 dated 30.7.71.
Agriculture Officer for Intensive Valley Development in Chirang and Tashigang	2	750-1250	-do-
Regional Agriculture Officer Thimphu	1	750-1250	Letter No. FA/Genl/106(A)/4616 dated 10.11.1971 issued to Rep. of India to process the relief of Shri K.C. Dey from U.P. State Service (Agri Department).
Plant Protection Officer Thimphu	1	750-1250	FA/Genl/106(A)/3122 dated 30.7.71
0. Executive Engineer (Minor Irrigation Irrigation)	1	Usual scale of of Executive Engineer as in India	-do-
11. Asstt. Agriculture Engineer	1	400-900	-do-
2. Asstt. Soil Conservation Officer.	1	400-900	-do-
3. Supdt./Asst. Director Sericulture	1	400-900	-do-
4. Asst. Soil Chemist, Thimphu	1	400-900	-do-

Category of Officer	No. of posts	Scale in Bhutan	Ref. made to Rep. of India
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ANIMAL HUSBANDRY DEPARTMENT

15. Farm Manager	3	400-900	FA/Genl/106(A)/4391 dt. 20.10.71
16. Sheep Breeding Officer	1	400-900	- do -
17. Pisciculture Officer	1	400-900	FA/Genl/106(A)/4132 dt. 18.9.71 The services of the officer is required for a period of 6 months only.

STATISTICAL CELL

18. Senior Investigator	1	400-900	FA/Genl/106(A)/3681 dt. 5.1.71
19. Junior Investigator	1	275-500	- do -

Category of officer	No. of posts	Scale in Bhutan	Type of jobs required to be handled.
20. Executive Engineer (during 71-72)	4	700-1250	Departmental construction, maintenance of residential/non-residential buildings, hill roads, bridges, water supply and 'Sewerage' works, designs of buildings, bridge coordination work on electrification of buildings
21. Assistant Engineer (during 1971-72)	6	350-900	- do -
22. Junior Architects/ Asstt. Architects. (during 1971-72)	3	350-900	Design/detailing for residential buildings, Plans of complexes of schools, hospitals, colleges, auditoria, residence, sports fields

No. NAB/024/151

Dated: 3rd April, 1972

PLANNING COMMITTEE - DISCUSSION THEREOF

Please refer to this Office Circular No. NAB/24/142 dated March 23, 1972 on the proposal to form a Planning Committee consisting of the following members:

1. His Royal Highness the Crown Prince
Jigme - Chairman of the Committee
2. His Majesty the King
3. His Royal Highness Tengyel Lyonpo
4. Her Royal Highness Ashi Sonam Wangchuk
5. Her Royal Highness Ashi Dechan Wangchuk
6. Hon'ble Home Minister
7. Hon'ble Finance Minister
8. Hon'ble Development Minister
9. Speaker of the National Assembly
10. Royal Advisory Council -- (2 members)
11. Dr. T. Tobgyel
12. Dasho Lam Penjore, - Secretary of the Committee
13. V. Swaminathan, Financial Adviser, Ministry of Finance - Asstt. Secretary of the Committee
14. Industrial Expert
15. G.N. Mehra, Financial Adviser, Ministry of Development.

In the absence of His Royal Highness the Crown Prince, Chairman, from any sitting of the Committee, His Majesty the King will preside over the Committee.

Sd/-
(SHINGKHAR LAMA)
Speaker, National Assembly of Bhutan

Copy to:-

1. Deputy Home Minister
2. Maksi Lam Dorji
3. Secretary, Ministry of Communication
4. Gyaltsi Khalowa
5. High Court
6. Audit Department
7. Dawa Tem, Incharge, Protocol.

- 23 -

CHAPTER III

Financial Resources of the Government
of Bhutan for the Annual Plan 1972-73

The Technical Team of the Planning Commission which visited Bhutan in 1970 in connection with the formulation of the Third Five Year Plan of Bhutan had recommended that with the modernisation of the country's economy, it is essential to introduce modern system of budgeting and budgetary control with the help of the services of competent experts already at the disposal of the Royal Government of Bhutan. In the discussions, the Team had with the Honourable Finance Minister of the Royal Government of Bhutan, the Team was informed that the Government had decided to accept this recommendation. The accounts for the calendar year 1970 had already been prepared and the accounts for 15 month period (1st January, 1971 till March 31, 1972) are still under preparation. It is proposed to adopt the financial year beginning from April 1, 1972 as the year for the purpose of the preparation of the budget in accordance with the practice adopted in India.

3.2 In the absence of the accounts which were being constructed for the year 1971-72, it was not possible to go into the details of the financial resources position of the Government of Bhutan and its contribution for financing the Annual Plan 1971-72. However, on the basis of the likely actual expenditure incurred (Rs.6.24 crores) and the aid received from the Government of

India (Rs.5.87 crores), the contribution of the Government of Bhutan for the Annual Plan 1971-72 has been computed at Rs.37 lakhs against Rs.40 lakhs recommended earlier by the Technical Team.

3.3 The detailed budget estimates for the year 1972-73 are still being prepared in the Finance Ministry and the budget is expected to be introduced in the National Assembly shortly. In a preliminary discussion with the Honourable Finance Minister and the Financial Adviser in the Ministry of Finance on the budget estimates for 1972-73, the Team was advised to adopt a figure of Rs.28 lakhs as the contribution of the Ministry of Finance for the Annual Plan 1972-73, including the contribution of Bhutan Royal Transport Service(BRTS). The gross profit from the Road Transport over the five year period was earlier estimated at Rs.80 lakhs of which Rs.66 lakhs was agreed to be utilised for replacement of old vehicles and the balance of Rs.19 lakhs including Rs.5 lakhs from the sale of old vehicles was to be taken as contribution of Government of Bhutan for financing the Plan outlay. The requisite details in regard to the operation of the BRTS were not readily available. The Honourable Finance Minister agreed to have separate accounts constructed in regard to BRTS so as to determine precisely the contribution of BRTS for financing the development Plan from year to year.

3.4 According to the existing practice, the Ministry of Finance is responsible by and large for the collection

of tax revenues whereas the Ministry of Development and Ministry of Trade and Industry collect non-tax revenues e.g. Agriculture, Animal Husbandry, Education and Health and P & T etc. According to the Ministry of Development, the contribution for the Annual Plan 1972-73 might be taken at Rs.10 lakhs of which Rs.5.5 lakhs may be from P & T and Rs.4.5 lakhs from other development schemes executed by various departments. Taking into account the receipts to the extent of Rs.2 lakhs of the Ministry of Industry and Trade from Handicrafts, Handlooms, Food Preservation Factory etc., the total contribution of His Majesty's Government of Bhutan for the Annual Plan 1972-73 may be placed at Rs.40 lakhs as under:

	(Rs. Lakhs)
Ministry of Finance	28
Ministry of Development, Industry; Trade and Forest	12
<u>Total</u>	<u>40</u>

3.5 The Government of Bhutan is considering proposals for mobilizing additional resources through fresh measures of taxation which might be presumably incorporated in the budget for 1972-73 which would be presented to the National Assembly in the course. It is suggested that the proceeds of these measures may be utilized to the maximum extent possible for augmenting the Plan outlays as recommended by the Team and as little resources as possible may be diverted to non-plan or general activities of the Government, so that the rate of progress in economic field in Bhutan could be further stepped up.

3.6 The Team has felt it necessary to draw attention to one or two aspects of the budgetary structure in Bhutan. Although the Royal Government of Bhutan has decided to introduce modern budgetary practices, it is not quite clear whether Finance Ministry would be in a position to present the national budget indicating the entire governmental revenues and expenditure both on Plan and non-Plan side. As indicated above, while tax revenues are collected by and large by the Ministry of Finance, the non-tax revenues are collected by the Ministry of Development and Ministries of Industry, Trade and Forests. The recovery of loans is also affected by respective departments. The Team would suggest that the collection of entire revenues of the Government (tax and non-tax) and the accounting of the recovery of loans should be centralised in the Ministry of Finance. The National Budget to be presented by the Honourable Minister of Finance should contain a complete picture of the entire governmental revenues and expenditure both under revenue and capital accounts; so that it would become possible to work out the contribution of Government of Bhutan for the development Plan from year to year, to exercise budgetary control over the public expenditure and to mobilise additional resources to the maximum extent possible for increasing the scale of development in Bhutan.

3.7 Ministry of Finance is currently undertaking development work outside the Plan e.g. Orchards, cardamom plantations, land acquisition and development, construction of houses etc. The Team is of the view that such activities should more appropriately be transferred to and executed by the concerned technical and development departments. Such items of development character should be integrated with the development Plan of Bhutan. This would facilitate the presentation of developmental effort in Bhutan in totality and would also enhance the contribution of Government of Bhutan for financing development Plans in the country.

Development Aid by the Government of India

3.8 As indicated in para 2.2 of this report, the Annual Plan 1972-73 outlay of Bhutan may be placed at Rs.711.5 lakhs. Of this Rs.40 lakhs will be taken as contribution of the Royal Government of Bhutan. It is understood that Government of India sanctioned a loan of Rs.60 lakhs to Royal Government of Bhutan sometime ago for commercial ventures. An amount of Rs.16 lakhs was utilised in 1971-72 leaving unspent balance of Rs.44 lakhs. The Government of Bhutan would like to utilize another sum of Rs.22.5 lakhs for loans (Rs.17.5 lakhs) and for setting up of industrial raw material and machinery depot (Rs.5 lakhs) (Details are set out in the Chapter on Industry and Mineral Development,

in 1972-73. This would leave with the Government of Bhutan still a balance of Rs.21.5 lakhs. It is recommended that this balance amount may be utilized for financing the Plan of Rs.711.5 lakhs as recommended by the Team. Taking into account the estimated contribution of the Royal Government of Bhutan (Rs.40 lakhs) and the unutilized amount of Rs.21.5 lakhs out of the loan of Rs.60 lakhs sanctioned outside the Plan, the gap between the recommended outlay and the resources mentioned above is Rs.650 lakhs. It is recommended that this gap may be covered by the development aid by the Government of India against the agreed aid of Rs.33 crores for the five year period 1971-76.

Release of Funds

3.9 In the meeting of the Team with the Planning Committee, the Hon'ble Development Minister stressed the need for timely and regular release of development aid by the Government of India for orderly progress of the Annual Plan. The following pattern of release were suggested by the Government of Bhutan:

First quarter	30%
Second quarter	25%
Third quarter	25%
Fourth quarter	20%

3.10 A somewhat larger proportion of the development aid in the first two quarters was pleaded on the ground that the projects were located in different parts of the country and it takes considerable time to procure from India necessary equipment and material and despatch them to these places. Unless the Government is placed in adequate funds in the first few months of the year, it will not be possible to purchase the required key material and equipment from India and transport them to the respective places well in time. After careful consideration of the matter, the Team is of the considered opinion that the proposal of the Royal Government of Bhutan for the quarterly release of development funds by the Government of India may be accepted. To facilitate the quick progress of the development Plan, it would be desirable to ensure automatic release of the quarterly advances in the first week of each quarter in respect of first three quarters and the release for the fourth quarter may be made on the basis of actual expenditure incurred in the first three quarters and the anticipated expenditure of the fourth quarter. This arrangement, if approved by the Government of India would be welcome to the Government of Bhutan.

Against the approved outlay of Rs. 73.20 lakhs for 1971-72, the actual expenditure up to February, 1971 and anticipated upto March, 1972 is reported to be Rs. 60.02 lakhs which does not appear to be unsatisfactory. In fact, in respect of 6 schemes the anticipated expenditure will be higher than the approved outlay. These schemes are - Direction; Agricultural Extension and Farms; Development of Manurial Resources; Distribution of Improved Seeds; Supply of Farm Machinery & Field Workshop and Enticiculture/Sericulture. Wherever there have been short-falls, the main reasons stated to be are: (i) slow progress of building programmes; (ii) difficulties in availability of technical personnel; and (iii) irregular availability of funds.

4.2 A Statement is enclosed indicating the details by programmes of the anticipated expenditure in 1971-72, the proposed and recommended outlay for 1972-73. In the following paragraphs, the position has been sorted out for individual scheme in regard to the actual achievement in 1971-72, targets in physical and financial terms for 1972-73 for them.

4.3 DIRECTION:

As a result of the initiation of the various extension activities and educational programmes, the work-load in the Directorate has increased. The Directorate needs to be provided with full complement of staff to share the increased responsibilities of the Director of Agriculture.

4.4 The post of Assistant Director Agriculture which is lying vacant may be filled up quickly. The term of the present Agricultural Information Officer expires early in 1973. Efforts should be made from now onwards to get a qualified Agricultural Information Officer, preferably with an experience of having worked in the hilly terrain.

4.5 The Agriculture Information Section also needs to be strengthened with an additional post of Photographer, because the Artist-cum-Photographer of the Information Unit has also to cater to the needs of all other Departments under Development Ministry, such as, Posts and Telegraphs, Public Works Department, Hydel Directorate etc.

4.6 The budget provision for 1972-73 under this scheme is Rs. 4.75 lakhs which will be utilised fully provided the full complement of staff is recruited immediately.

4.7 TRAINING:

Three candidates were sent to Agriculture School, Bulandshahr, U.P. because the candidates could not be admitted in any other School. Three or four students are likely to be sent for Degree Course in Agriculture this year through the Education Department, who are already in correspondence for securing seats. It will be useful if some students are sent to Agricultural University, Pantnagar, or Punjab Agricultural University, Ludhiana. This year, it also proposed to send two trainees for Assistants' Training Course in Soil Conservation at Ranchi and two in Crop Weather Observatory Training at Poona for three months. The Team may please expedite the finalization of these two important training programmes.

A provision of Rs. 2.00 lakhs may be adequate for this scheme.

4.8 AGRICULTURE RESEARCH:

(a) Rice: The varietal position and the agronomical practices were discussed in detail. In view of the fact that the I.C.A.R. (All India Co-ordinated Rice Improvement Project) is not yet ready with dwarf, high yielding varieties of rice for high hills, it may be desirable to try the pre-released varieties under the Minikit programme which is going on in various States in India. This scheme gives an opportunity to the farmer to select his own variety and makes him 200 kgs. of seed available free of cost in just one season. The Director, Rice Development, Government of India, will try to arrange 100 kits (of IET-1039 and IET-1991 which have done better than Padma and IR 8 in India and are also fine-grained).

(b) Maize: Maize varietal position is O.K. though Bondey farm is still advocating local Sikkim Maize.

(c) Potato: White-skinned varieties are preferred in Bhutan. Nilmoni, Jyoti, Jeevan, Chandramukhi, Alankar and Kufri Navan are being recommended. The disease aspect is reported to be not at all serious in Bhutan at present.

(d) Barley: Local barleys are being currently used mostly for brewing or malting. It is suggested that new Barley varieties namely, Kanpur-18, Kanpur-24, Kanpur-71 Amber and some naked six-rowed barley may be obtained from Kanpur, U.P. for field trial and for malting/brewing.

.../-

(e) Wheat: High yielding varieties Sonalika and Kalyansona of wheat seem to be doing well and these may be further popularised among the farmers. Under rainfed condition in foot-hills and valleys, K-65 is reported to have done well and since it is more suitable for bakery and biscuit making than Mexican dwarfs, it may be utilised locally for this purpose with a little publicity effort. It will be necessary to keep genetic purity by regularly roguing against mixture with local tall wheats or renewing the foundation seed every 5 years from U.P.

Short duration legumes like Moong, Pusa Baisakhi (IARI), Type-2 (Shining Moong) or Type-44; Type-9, Urd, Type-I, Type-21 (all from U.P.), Ageti, Sharda (from IARI) in Arhar (for foot hills) are now available and may be fitted in double or triple cropping pattern according to the suitability in different valleys and foot-hills to augment pulse production and to renovate soil fertility.

4.9 The Research Programme is well laid out, but it needs to be augmented by way of collection of local materials for different crops and maintenance of germplasm for future breeding programmes. This is essential because with the rapid spread of the dwarf high yielding exotic or indigenous varieties local materials of different crops possessing pests and/or disease - resistance or adaptability will altogether disappear. This will mean irreparable loss. For this, the services of an experienced Plant Breeder who is trained in this discipline are immediately required.

4.10 It is good that an Assistant Soil Chemist is in

position. The work on Soil Testing Laboratory may be taken up on priority basis and extended to all the regions. The soil testing will have to be geared up for making recommendation for balanced fertilization of different crops after soil test.

The allocation of 6.67^l lakhs is recommended for this scheme.

4.11 AGRICULTURAL EXTENSION AND FARMS:

The more Extension Centres at Dagapala and Tongsa are to be started and the technical and administrative positions are to be filled up. It will be necessary to construct buildings in the interior places because private houses for accommodation and storage are not available. One Storage Godown for storing agricultural inputs at Samchi will also have to be constructed. The outlay of Rs. 13.00 lakhs is considered adequate.

4.12 HORTICULTURE RESEARCH:

The proposed Research Sub-Station at Bhur may be postponed for the time being and efforts be made to strengthen the existing Horticulture Research Stations and to provide more modern equipment and amenities there. The posts of Horticulturist, Potato Development Officer, Vegetable Specialist are lying vacant since long which need to be immediately filled up. The proposed buildings are necessary to house the staff who are likely to join shortly. Since several posts are lying vacant, there may be a saving of Rs. 50,000/-. The outlay of Rs. 5.00 lakhs is recommended.

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4.13 HORTICULTURE EXTENSION AND CENTRES:

The proposed subsidy @ Rs. 150/- for lands which need no jungle clearing and a sum of Rs. 300/- where jungle clearance is required is the barest minimum for starting an orchard. This should be subject to a limitation that nobody is given subsidy for more than 2 acres at a time. Out of the total outlay of Rs. 5.83 lakhs, Rs. 5.50 lakhs may be required.

4.14 PLANT PROTECTION:

A good programme has been chalked out for supply of free pesticides including lending of spraying and dusting equipment. It may be desirable to charge nominal amount as spraying charge (for the maintenance and up-keep of the machineries etc.) where sprayer and duster are used. It will also give a feeling of the involvement of the farmers in this important programme. It is proposed to taper of the subsidy gradually. An allocation of Rs. 4.20 lakhs is considered adequate for plant protection.

4.15 DEVELOPMENT OF MANURIAL RESOURCES AND SUPPLY OF FERTILISERS:

Anticipated expenditure is Rs. 1.64 lakhs against an outlay of Rs. 1.80 lakhs. Manures and fertilisers are one of the most important inputs in Agriculture. Initially, in the Intensive Valley Development Programme area (which was long neglected) greater inducement is proposed to be given to the farmers through subsidy for purchase of balanced

fertilisers. It may, however, be desirable to keep uniform rate of subsidy @ 50% in all areas and for all programmes. Soils of Bhutan are generally acidic. Some soils are highly acidic. Hence a programme for liming should be envisaged in due course particularly where urea has been used year after year. Since the country appears to be rich in lime-stone deposits, it may be worth-while involving Industry in setting up of Lime Kilns on pilot basis for supplying lime at cost price for agricultural purposes. An outlay of Rs. 1.80 lakhs may be approved. The Director of Agriculture felt considerable difficulty in getting fertilisers through Fertiliser Corporation of India and requested help for direct supply from factories.

4.16 DISTRIBUTION OF IMPROVED SEEDS:

Varietal position has already been discussed before. However, it is suggested that some new crops may be introduced which are consumed locally like mustard, groundnut and short-duration pulses, green gram (moong), black gram (urid) all of which can be grown under rain-fed conditions particularly on the foothills and low valley. The estimated requirement of seeds appears to be all-right and a grant of Rs. 1.15 lakhs may be agreed to. This amount will not include the cost of wheat, rice and maize seeds which are available in adequate quantities on the Departmental farms of Bhutan.

4.17 FARM MACHINERY AND FIELD WORKSHOPS:

This is another good scheme, because the farmers can not afford to purchase expensive machines like Power-tillers, Threshers, Shellers etc. and these should be hired to them at nominal rent. An outlay of Rs. 2.61 lakhs is recommended.

4.18 DISTRIBUTION OF FRUIT PLANTS,
SEEDLINGS AND VEGETABLE SEEDS:

Planting materials of various fruit trees including seeds of vegetables are supplied at fixed subsidized rates which vary from 20 paise to Rs. 2/- per plant depending on the type of fruit. Seedlings of important vegetable crops are also supplied from the farms and nurseries at Rs. 1/- per hundred. The proposed outlay of Rs. 1.65 lakhs may be enhanced to Rs. 1.95 lakhs in future as great demand for the fruit plants and vegetable seeds has now been generated due to awareness among the farmers and city dwellers also.

4.19 INTENSIVE VALLEY DEVELOPMENT PROGRAMME:

This is a big and integrated scheme for the over-all development of the valley in which agriculture will have necessarily to play an important part along with other development departments for infra-structural development. But because most of the higher and senior posts are still lying vacant and also Irrigation Schemes have not yet been sanctioned, there may be a saving of about Rs. 2.00 lakhs. Hence Rs. 11.50 lakhs is suggested. One discipline which is important in the Intensive Valley Development Programme and seems to have been omitted is the Soil Conservation. Unless the post of Soil Conservation Officer under the relevant scheme is filled up quickly, this work will also not be geared up. The importance of Soil Conservation on all the hills is too well known to be over emphasised. The appointment of the Soil Conservation Officer on top-priority basis may be taken up.

4.20 SERICULTURE AND ENDICULTURE:

There is considerable scope for development of silk (both endi and seri) in Eastern Bhutan where mulberry and castor plants are reported to thrive well. For this, the first pre-requisite is the appointment of a trained sericulturist. This scheme will provide ample employment opportunities for all age groups of both the sexes and will also improve the economic condition of the farmers, because there will be a considerable demand for both types of silk in India and abroad. The outlay of Rs. 0.80 lakh may be approved.

4.21 BONGDE FARM:

A copy of the Report of Bongde Farm was supplied by the Director (Agriculture). No assessment of the performance of crops or extension work done was available. Result of the visit to the Bongde Farm by the Technical Experts of the Team is given in the Annexure. The total outlay may be limited to Rs. 3.50 lakhs as even this works out to about Rs. 22,000/- per acre for a small farm of less than 22 acres under cultivation.

4.22 DEVELOPMENT OF WALNUT:

This is a small scheme. There are possibilities of extension of walnut cultivation both for fat and protein and timber purposes. Rs. 0.50 lakhs may be sanctioned for this scheme.

4.23 VISIT OF EXPERTS:

The Director (Agriculture) has already requested for the consultant services of Project Coordinators or

their Experts in the field of Rice, Wheat and Temperate Fruits from I.C.A.R. The scope and content of this scheme could be enlarged so that it becomes a two-way traffic. The technical personnel of Bhutan may be encouraged to visit some of the Projects like Mandi (Himachal Pradesh) and also important Workshops and Symposia to get the latest information in the Research and Extension fields in India. A small provision of Rs. 5,000/- is made on transport cost by road and incidental expenditure etc. which may need revision upward at the end of the year, 1972-73.

4.24 PURCHASE OF BULLOCKS:

The anticipated expenditure is Rs. 1.30 lakhs against an outlay of Rs. 1.01 lakhs.

It appears that epidemic arose in 1969. Government have supplied bullocks free of cost for the past two years. It will be worthwhile considering, whether in future this could be given as a loan even in part, to be recovered in easy instalments. The distribution is done by the Home Ministry, who will find no difficulty in recovering the loan but the Financial Adviser and Chief Accounts Officer informed that it may not be possible to go against the decision of National Assembly. A sum of Rs. 1.00 lakh may, therefore, be approved.

4.25 MINOR IRRIGATION:

Rs. 8.83 lakhs out of an outlay of Rs. 12.64 is the anticipated expenditure during 1971-72.

During the discussion it transpired that slow progress under the Minor Irrigation was partly due to

.../-

the difficulty in procurement of raw materials (mainly cement) and partly due to non-sanction of schemes, pending revision of the policy of the Government in this regard. The supply position of cement has not yet appreciably improved. There is no doubt that the scheme will play an important role in the agricultural economy of Bhutan. An outlay of Rs. 16.01 lakhs may be provided under this scheme.

4.26 SOIL CONSERVATION:

The importance of Soil Conservation works in the high hills is too obvious to be emphasised. It is not a happy situation that the Soil Conservation scheme has not yet made a beginning due mainly to non-availability of a technical expert. Appointment of Soil Conservation Officer has to be expedited on top-priority basis. In the meantime, the Government may continue the subsidy @ Rs. 150/- for contour bunding and Rs. 300/- per acre for terracing so that the valuable top soil is conserved at proper places instead of being washed down the valley. Apart from this, Soil Conservation demonstrations will also have to be undertaken to convince the farmers about the usefulness of soil conservation practices for checking erosion and for preserving the precious soil. An outlay of Rs. 0.80 lakh is suggested.

4.27 AGRICULTURE ECONOMY AND CO-OPERATIVE MARKETING SOCIETY:

No expenditure could be incurred last year due to non-availability of the deputationist staff.

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The provision of Rs. 2.80 lakhs is mostly for Storage and Ware-Housing facilities and may be agreed to Co-operatives have to be organised to take care of marketing the agricultural and animal husbandry produce.

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TOUR REPORT ON BONGDE FARM

(1) Total area of the farm is 22 acres, out of which 15-16 acres are under cultivation. The Japanese expert told that 14 technical people are working on the farm.

Though there are 22 posts sanctioned for this small farm.

The strength of permanent labour is 20, which is rather high.

Powers:- 1 pair of bullocks, 13 power tillers, 5 or 6 threshers etc.

Rice, maize, soyabean, wheat and oats are the common crops in addition to all types of vegetables.

Fertilizers:- Suphala 15:15:15 or 8:8:8 (Rallies CAN & urea are also used but not much of Ammonium Sulphate.

The fertiliser supply is reported to be uneven. If arrangements for direct supply from the factory are made it will greatly help.

Varietal position:- 3 exotic 'Japnica' varieties of rice are grown, out of which one is very popular. Offhand he did not remember the pedigree or origin of those varieties (may be he did not like to disclose).

Maize: Sikkim local of 3-3½ months duration (for green ear roasting) is most popular. No knowledge or experience of hybrids, composites or synthetics which are reported to have done well in most parts of Bhutan.

Wheat: Kalyan sona & Sonalika most commonly grown varieties in single cropped irrigated areas where they take 6 months to mature.

Ridley from Punjab is the old traditional variety. Has not tried K 65 of U.P. which is reported to be doing better under rain-fed areas. Sonalika & Kalyan sona were standing in the field and the general growth and vigour of the crop was subnormal. The stand was very thin and the row to row distance was 12" as against 8-9". There was no synchrony in tillering which was due to poor agronomical practices and delayed first irrigation after seeding. In terms of "annavar" the crop was 6-8 annas and not more. The rice nursery was planted and there too the growth of seedling was not uniformly good. On a query to the age of seedlings at the time of transplantation, the expert told that 8 weeks old seedlings are transplanted as against 4-5 weeks old which is the optimum age. He also showed the extension work done by him on a farmer's field. The vegetable plots were neither properly tended nor had normal healthy growth.

(ii) Agricultural Research Station, Lungtenphus The

total area of the farm is 44 acres, out of which over 32 acres are under cultivation. The technical personnel employed and the strength of labour is much less though the area is more than double of the Bongde Farm. As a consequence some fields particularly on the road side looked weedy. The weeds were not tall and hence were not competing with the crops for sunlight or CO₂ - the two essential requirements. It may be pertinent to point out here that a small weed population as undergrowth is desirable as it provides canopy

over the dry soil in this hot season and prevents undue loss of moisture by evaporation. Of course, the weeds should never be allowed to gain an upper hand over the main crop.

The crop condition in general and the wheat crop particularly was significantly better than at Bongde Farm. Due to sound agronomical practices and good care the crop growth was uniform with synchronous tillering and hardly any, off types. It looked 12 to 14 annas crop in terms of annavari.

This farm, being a research farm, has to incur extra expenses to properly conduct the trials with replications and randomization. Considering the meagre grant of about Rs. 4,000/- per acre as against Rs. 22,000/- or so per acre at Bongde Farm, the staff here need encouragement and complements, so that they may keep it up against all odds.

Scheme No.	Revised budget estimate for 1971-72 (in lakhs) R B E	Actual expenditure upto February '71 & anticipated upto March '72 (in lakhs)	Budget Estimate for 1971-72 (in lakhs)	Recommended allocation for 1972-73
1.	2.	3.	4.	5.
1. Direction.	6.24	<u>6.38</u>	4.75	4.75
2. Training	1.88	<u>1.86</u>	2.25	2.20
3. Agriculture Research	7.79	<u>6.13</u>	6.67	6.67
4. Agri. Ext. & Farms.	13.23	<u>14.68</u>	14.92	13.00
5. Horticulture Research.	3.95	<u>3.03</u>	5.83	5.00
6. Horti. Extn.	2.79	<u>1.53</u>	5.99	5.50
7. Plant Protection.	2.81	<u>1.47</u>	4.20	4.20
8. Development of Mannurial Resources etc.	1.55	<u>1.64</u>	1.80	1.80
9. Distribution of Improved Seeds.	2.18	<u>2.32</u>	1.15	1.15
10. Supply of Farm Machinery & Field Workshop.	3.28	<u>4.28</u>	2.61	2.61
11. Distribution of Veg. Fruit Seeds/plants & seedlings.	1.55	<u>1.50</u>	1.65	1.95
12. Endiculture/Sericulture.	0.53	<u>1.28</u>	1.05	0.80
13. Intensive Valley Development Programme.	6.43	<u>0.94</u>	13.58	11.50
14. Bongde Farm.	3.45	<u>2.71</u>	3.77	3.50
15. Development of Walnut and Progeny Orchard.	0.58	<u>0.14</u>	0.52	0.52
16. Visit of Expert.	0.05	-	0.05	0.05
17. Purchase of Bullocks.	1.00	<u>1.30</u>	1.00	1.00
18. Soil conservation.	0.21	-	0.91	0.80
19. Minor Irrigation.	12.64	<u>8.83</u>	18.17	16.00
20. Agri. Economy & Coop. marketing society.	1.22	-	2.80	2.80
	<u>73.26</u>	<u>60.02</u>	<u>93.67</u>	<u>85.80</u>
			(say Rs. 86.00)	

4.22

FORESTS:

Against the approved outlay of Rs. 25 lakhs for 1970-71, the expenditure in 1971-72 is estimated at about Rs. 23.74 lakhs. The outlay proposed for 1972-73 by the Forest Department was Rs. 35.75 lakhs. The outlay proposed for two schemes - Direction and Construction of buildings is somewhat on the high side with reference to the Five Year outlay recommended by the Team as well as the anticipated expenditure in 1971-72. Allowing for some reduction in the proposed outlay for these two schemes, an outlay of Rs. 32 lakhs is recommended for schemes under Forests (Details in enclosed statement II).

4.29

COOPERATION:

Against the recommended outlay of Rs. 7.05 lakhs for 1971-72, an expenditure of Rs. 1.12 lakhs was incurred. There has been slow progress on this programme. It is desirable to accelerate the progress of this important sector and take up the schemes to eliminate the middle men and obtain from the farmer a fair share of their produce through cooperative marketing societies. The proposed outlay of Rs. 2.8 lakhs is suggested. The progress of this work programme may be reviewed during the course of the year and augmented if necessary by internal adjustments for savings under other heads of development, if necessary.

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BHUTAN THIRD FIVE YEAR PLAN AND ANNUAL PLAN 1972-73 - FORESTS

(Rs. lakhs)

	Third Plan outlay - recommended	1971-72		1972-73	
		Recomm- ended	Likely Exp.	Proposed by Bhutan Govt.	Recomm- ended
1.	2.	3.	4.	5.	6.
1. Protection	62.00	10.50	11.20	13.42	12.42
2. Survey of Forest Resources and Land Use Survey.	25.00	4.00	-	5.00	5.00
3. Training of Forest Personnel.	5.90	0.83	0.90	1.41	1.41
4. Survey and Demarcation.	5.00	0.60	0.14	0.70	0.70
5. Exploitation of Forests.	12.10	0.75	0.23	0.70	0.70
6. Afforestation.	15.00	2.02	2.36	2.70	2.52, 70
7. Roads and paths.	13.50	1.79	1.55	1.10	1.10
8. Silvicultural Operations.	2.00	0.40	0.29	0.28	0.28
9. Forest Industries.	0.50	-	0.03	0.02	0.02
10. Construction of buildings.	14.00	3.15	3.05	7.87	7.12
Wild Life Sanctuary.	5.00	0.96	1.02	0.55	0.55
Total:	160.00	25.00	20.77*	33.75	32.00

* Likely expenditure reported by Bhutan Government
is Rs. 23.75 lakhs.

CHAPTER - V ANIMAL HUSBANDRY (INCLUDING PISCICULTURE)

Since Bhutan's economy is based on the pattern of its agriculture and animal husbandry, efforts have been made to determine the feasibility and utility of individual programmes, their impact on regional development and a tie up between the proposed physical targets and the financial allocations, keeping in view the paucity of technical personnel and meagre Plan funds. Again structural changes in respect of some schemes like livestock farms have been suggested to make better use of the existing facilities for fulfilling the objectives laid down.

(Annexure I).

5.2 The Third Plan provided an outlay of Rs. 125 lakhs. Against an outlay of Rs. 35 lakhs for 1971-72, the anticipated expenditure is of the order of Rs. 29 lakhs. The shortfall in expenditure is on account of slow progress on buildings to be constructed by P.W.D. A provision of Rs. 31.73 lakhs has been proposed for the year 1972-73. Statement I indicates the Third Plan Plan outlay, anticipated expenditure in 1971-72, the proposed and the outlay recommended for 1972-73 for various schemes. The paragraphs below give the position by individual schemes.

5.3 DIRECTION:

Against the anticipated outlay of Rs. 4.06 lakhs for 1971-72, a sum of Rs. 2.94 lakhs has been proposed for the supervisory staff at the headquarters for 1972-73. On the technical side, there is one Joint Director and one Deputy Director (whose services have since been terminated). There is no

technical hand to assist the Joint Director in the efficient implementation of the Plan schemes. The activities of the Department are at present confined to three regions, viz. Eastern, Western and Central. It will, therefore, be desirable to have three Regional Animal Husbandry Officers with their headquarters in the respective regions. An additional amount of Rs. 1.56 lakhs would be required. Thus, the total provision for 1972-73 would come to about Rs. 4.50 lakhs.

5.4 LIVESTOCK FARMS:

At present, there are 8 composite livestock farms in the different regions of Bhutan. The relevant information on these farms is indicated in Statement III.

5.5 Keeping of all types of livestock on all farms may not be advantageous on account of the possibility of inter-communication of many diseases from one species to the other. Technical supervision may also not be efficient in view of the fact that the Farm Manager may not have specialised knowledge of all types of animals. The farms are relatively very small and consequently cannot afford to appoint specialist in different fields on all the farms. The nature of demand will have to be kept in view, while locating the particular type of livestock e.g. dairy cattle, and poultry should be kept near larger towns, while sheep and horses could be kept away. The piggery development should be confined to areas where the piggery products are important items of diet of the people and the feeds are easily available. Another important fact which comes to light is that in some of the

livestock farms electricity is not available and consequently poultry development cannot be taken up with advantage.

Taking into consideration all the above facts, following suggestions are made to re-organise the farms in a way that they could be run more efficiently and in future could form the pivot around which the developmental activities could easily be taken up:

(i) Livestock Farm, Bidung: It may not be advisable to continue it as a Livestock Farm in view of many shortcomings. Since a lot of money has been spent in the past on buildings etc., it can, however, be utilised as a sheep breeding farm during winter when sheep have to be brought down to lower altitudes. During summer they can migrate to Mera to avail of the alpine pastures.

(ii) Mithun Breeding Farm, Thromong: It may be confined to Mithun breeding only. The proposal to locate a horse breeding unit may be deferred. A saving of Rs. 0.50 lakh is expected on this account.

(iii) Livestock Farm, Lingmethang: There is a good scope for developing this farm into an equine breeding centre. The mules are in great demand and it is hoped that it may turn out to be one of the best mule producing centres. At present, there is no good Jack Stallion. It is reported that arrangements have been made to procure one young Jack Stallion from State Livestock Farm, Hissar. Since mules are in great demand, it may be desirable to obtain at least 3 more Jacks so that a few stud centres could also be set up at

suitable places. When fully developed it may meet the requirement of the army to some extent, in addition to the requirement of public.

(iv) Livestock Farm, Chirang: This farm consists of two areas, one at Chirang proper and the other at Sarbhang, which is a developing township in the foothills, where electricity is available. It is the gateway of Chirang valley. A poultry farm could be established at Sarbhang. The area of 10 acres is quite sufficient for the purpose. Chirang, which has an area of 200 acres, could be utilised for cattle breeding and pig breeding units. Each centre will have to be manned by separate officers.

(v) Livestock Farm, Paros: Considering the demand for piggery and poultry and the limitation of the farm area, it may be desirable to concentrate on piggery and poultry programmes there.

(vi) Livestock Farm, Thimphu: Since Thimphu is the capital of Bhutan, demand for milk and poultry produce is bound to grow. It would, therefore, be advantageous to concentrate on the development of dairy cattle and poultry. The adjoining areas may be taken up for intensive cattle development programme with livestock farm acting as a nucleus. This farm should not only provide good genetic material but should also take up research on different aspects of cattle husbandry.

(vii) Livestock Farm, Samchi: Although the area of the farm is about 100 acres, the cultivable area is only about 60 acres. Irrigation facilities are lacking but electricity

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is available. As the demand for piggery and poultry products is quite substantial, the piggery and poultry farms may be developed. The remaining area could gainfully be utilised for a bull rearing centre.

5.6 VETERINARY DISPENSARY:

At present, there are 6 existing Veterinary Dispensaries at Thimphu, Paro, Samchi, Phantsholing, Sarbhang and Deothang. Two are at various stages of development at Wangdiphodrang and Chirang. Two more are proposed for 1972-73 at Shemgong and Dorokha. This could be deferred for the present. It is reported that some of the dispensaries are at present under the charge of Veterinary Compounders. It is suggested that all the Veterinary dispensaries should be manned by qualified Veterinary Assistant Surgeons. Since there are only 5 Veterinary Assistant Surgeons, 3 additional hands will be required. A saving of Rs. 1.30 lakhs is expected, which could be utilised for the development of livestock farms.

5.7 YAK DISEASE ERADICATION:

Yaks are found at higher altitudes. They are used as pack animals, for production of milk and meat. Yaks are very useful for the local inhabitants and play a very great role in their economy. Gid (Coenerosis) is a common disease afflicting these animals. During the Second Plan, considerable steps were taken to control it. The programme is being continued. A sum of Rs. 0.29 lakh is proposed for 1972-73.

5.8 TRAINING IN ANIMAL HUSBANDRY:

The objective of this scheme is to train local boys in Animal Husbandry practices. Their services are utilised as Veterinary Field Assistant/Livestock Assistant and Veterinary Compounder. To get 10 boys trained in 1972-73, a sum of Rs. 0.57 lakh is proposed.

5.9 DISEASE INVESTIGATION LABORATORY:

At present, there is no Disease Diagnostic Laboratory in the country for the proper diagnosis of livestock diseases and their treatment. There could be two such laboratories, one for the Eastern and the other for the Western Region. However, only one Disease Investigation Laboratory has been proposed at Thimphu and a sum of Rs. 1.40 lakhs has been provided during 1972-73. This will help in initiating the work. After the appointment of a Disease Investigation Officer, local Veterinary Assistant Surgeons should be trained at the laboratory. After gaining experience, the proposal for the second laboratory can be considered.

5.10 PISCICULTURE:

There is good scope for development of trout fisheries in Bhutan. Rivers and streams have considerable trout in them. The topography, soil and climatic conditions of Thimphu are more or less similar to that of Tawang valley of Lameng District in Arunachal Pradesh. The temperature ranges from (-) 4°C to 12°C. There is a miniature trout hatchery at a place 'HA' about 120 kms away from Thimphu at an altitude of 9,000 feet. The work at the hatchery is done in a crude manner. The environmental conditions and the nature of waters

are well suited for the successful propagation of trout. The adult fish from the nearby streams are caught by using cast-nets and stripping is done. Fertilised eggs are placed in wooden hatching boxes, which have no provision of gills and water from a spring is allowed to flow over the eggs slowly. In this way, 10,000 to 20,000 hatchings are produced annually. Near the hatchery, 2 nursery ponds and 2 to 3 stocking ponds are constructed. Upto fry stage, the fish remain in the hatching boxes and after that they are stocked in the nursery ponds. No diet schedule is maintained.

5.11 There is a considerable scope for pond culture and paddy-cum-fish culture. *Cyprinus carpio* (common carp) is the fish most suited for introduction in ponds. This work, however, needs survey and organisation of the activity.

5.12 It is suggested that the construction of small to medium sized domestic fish ponds may be encouraged with Government subsidy in the first instance. Small seed farms have also to be constructed to facilitate supply of seed. One such farm may be located in a radius of about 10 miles. This is necessary in view of the transport difficulties. The services of an expert should be obtained to plan, organise and implement the programme. The expert will arrange for the training of local personnel.

5.13 A sum of Rs. 1.00 lakh has been proposed for 1972-73. Immediate action should be taken to obtain the services of an expert in fisheries to organise work on proper lines. Pending the appointment of Fisheries Officer, a sum of Rs. 0.50 lakh need be provided for 1972-73.

5.14 VISIT OF EXPERTS:

A small amount of Rs. 5,000 has been proposed under this scheme. Perhaps more funds will be necessary in case experts in different fields are invited.

5.15 In view of the above suggestions, an outlay of Rs. 35.00 lakhs would be required against the proposed outlay of Rs. 31.73 lakhs for the year 1972-73.

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TARGETS AND ACHIEVEMENTS

5.15 Statement II shows the achievements during the First and Second Plan periods in respect of various Animal Husbandry programmes. It also gives the targets for the Third Plan, targets and achievements during 1971-72, as well as targets proposed and recommended for 1972-73. This has not been the practice in the Department of Animal Husbandry so far, to adopt a systematic procedure of showing the progress in relation to the targets of various programmes undertaken. The annexure, it is hoped, will serve as a guide for the future.

5.16 In the Third Plan, an attempt has been made not only to classify the various programmes under appropriate heads but also to indicate the progress in different fields in relation to the targets in different years. In respect of the scheme relating to the expansion of livestock farms, it was suggested to take up only two farms during 1972-73 against 5 proposed. Since, there are 7 existing farms of which 2 have already been taken up during the first year, it is considered desirable to phase out this programme.

5.17 The Third Plan envisaged establishment of 10 new veterinary dispensaries, of which 2 have already been set up during 1971-72. Two more were proposed to be taken up during 1972-73. Since additional funds were required for the re-organisation of livestock farms and the strengthening of the supervisory staff, it is considered necessary to defer the programme. Instead, it was suggested to take up

the strengthening of two existing veterinary dispensaries since it required comparatively lesser funds.

5.18 It was observed that only 20 rams were distributed during 1971-72 against the Plan targets of 250 rams. It was felt that corrective measures might be taken to step up the progress and consequently it was suggested to take up the distribution of 80 rams, keeping in view the production of rams on the livestock farms. Similarly, the proposed target of 500 boars was raised to 600 in view of the fact that pork and pork products were in greater demand. The Director of Animal Husbandry agreed to intensify the piggery development programme.

5.19 It was envisaged to distribute 70,000 eggs for hatching during the Plan period. The number of hatching eggs distributed during 1971-72 were not available. However, a higher target of 14,000 eggs was suggested against 12,000 proposed so as to accomplish the Plan target. Actual number of inseminations performed through A.I. technique were not readily available. Perhaps a modest target of 6000 inseminations during 1972-73 may not be difficult to achieve.

5.20 Regular prophylactic vaccination against contagious diseases like B.Q., H.S., F & M, R.P., Anthrax, swine fever, Harkhet etc. is very important to keep the livestock and poultry in healthy condition. Any negligence may have a serious repercussion on the productivity. Keeping in view the availability of different types of vaccines and the staff, a target of 50,000 vaccinations for 1972-73 appears quite realistic. In the subsequent years, higher targets will have to be fixed.

5.21 There appears great paucity of trained hands in the Department. Consequently, it was considered desirable to get 10 candidates trained during the year 1972-73 against 5 in the previous year to fill in the vacancies. This programme needs to be further stepped up.

5.22 The information furnished in regard to milk, eggs and wool production pertains to Government livestock farms. In the absence of a survey and the non-existence of a statistical unit, it has not been possible to estimate the production of the country as a whole. This deficiency will persist till such time the Government is able to organise statistics on sound lines. No target in respect of these commodities has, therefore, been suggested.

5.23 As regards import of exotic animals, the Department has not worked out its requirement for 1972-73. After the reorganisation of livestock farms, they may be able to indicate their requirement species-wise.

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SHEEP AND YAK DEVELOPMENT

Geographically, Bhutan may be divided into four principal zones, the Eastern, Central, Western and the Northern. Animal Husbandry activities are mostly confined to the first three zones. The Northern zone is mostly rocky, severe cold climate, rainfall scanty and the average altitude about 10,000 feet. It is sparsely populated and the means of communication are difficult, local inhabitants being the poorest section of the country. Except Yak and sheep, no other type of livestock can thrive in this area. Since animal husbandry activities have not yet been extended to the Northern zone, it may be desirable to take up a few schemes pertaining to sheep, pashmina goats and yak development with a view to ameliorating the economic conditions of the inhabitants.

DAIRY AND POULTRY UNIT

Phuntsholing is a developing town and in course of time it may become the most important town in Bhutan. Being a base town, it serves as a gateway to Bhutan. In view of these considerations, there appears very good prospects for the development of poultry and dairying to meet the requirement of eggs and milk. To undertake these activities, it may be worthwhile to set up an Intensive Cattle Development Project of medium size or a key village block and an Intensive Egg and Poultry Production-cum-marketing Centre or a poultry extension centre near Phuntsholing. To begin with, a rural dairy centre could be set up for supplying chilled milk.

This could eventually be transformed into a milk supply scheme by installing a medium sized milk plant.

SLAUGHTER HOUSE

In Bhutan, by and large, people are non-vegetarian. Slaughtering is done in scattered places in most unhygienic manner, which is a great health hazard, besides involving considerable economic loss. Piggery products are in great demand but processing is unknown. Flaying is done in most crude manner, which reduces the value of hides. Most of the inedible products are allowed to go waste. Contaminated meat is the source of many diseases. In Thimphu valley, this is one of the greatest health hazards as people are known to consume meat of animals slaughtered many months back.

Considering various aspects, it may be worth-while to suggest the setting up of a slaughter-house-cum-meat processing complex, with requisite facilities for ante and post-mortem examinations, mechanical devices for hoisting, stunning and dressing operations, arrangements for systematic collection, preservation and utilisation of all by-products. The following units are suggested:

- (i) Large animal slaughtering unit
- (ii) Small animal slaughtering unit
- (iii) Pork-processing plant
- (iv) Small poultry dressing plant
- (v) Cold storage and rendering down plants.
- (vi) Training centre for hide-flaying, dressing and curing, systematic collection, efficient preservation, processing and full-utilisation of slaughter-house by-products and wastes.

The best place to locate this complex would be Thimphu, the capital city of Bhutan, where the demand for animal products is quite substantial and is gradually on the increase. Since the technical resources of the country are limited and there are not many persons fully conversant with the construction and management of modern slaughter-house, it would be desirable to obtain the services of one or more experts in these particular trades.

STATISTICAL UNIT

It is understood that there is neither any statistical cell in the Department of Animal Husbandry nor any other organisation in the country to undertake the systematic enumeration of livestock population and to assess the quality, productivity and their contribution to the national economy. For efficient planning of livestock projects and evaluation of the progress, it is very essential to have reliable data. Consequently, it is suggested that a small statistical unit may be set up in the Department.

FEED AND FODDER RESOURCES

Since cross-breeding programme is underway, augmentation of feed and fodder resources becomes imperative. However, this programme is not keeping pace at the desired level with the result that the impact of cross-breeding might get diluted. Besides growing of forage crops on the livestock farms, it may be desirable to supply fodder seeds to the livestock owners, who can afford to grow them in their fields. Since cultivable lands are limited, pasture development programmes could be undertaken. Bhutan has a rich and extensive natural floral

resources. It may be desirable to make use of the extensive vegetation. A survey might be undertaken to determine the palatability and nutritive value of different types of wild grasses, bushes and tree leaves.

API CULTURE

Bee being very common all over the hills, honey is obtained simply for the labour of gathering it. This not only causes considerable loss to the bee population, but pure honey is a rarity. What is needed, at present, is the introduction of improved methods of keeping bees and a spread of the knowledge of proper methods of taking out the honey from the combs and of taking proper care of the honey. This will vastly improve the present conditions. Introduction of improved methods of bee-keeping will increase the production of honey.

To take full advantage of the extensive flowering plants, it may be desirable to adopt modern methods of apiculture. To begin with, a small unit could be located at some of the livestock or agricultural farms. Modern methods of bee-keeping implies the making of hives, appliances and the proper management of the bees. This is directed towards bringing the bees as much under control as possible, giving them facilities for gathering and storing larger quantities of honey so that larger surpluses may be obtained and securing the surplus in as pure a condition as possible.

In this context, it may be desirable to obtain the services of an expert from the Entomology Division of the Indian Agricultural Research Institute, Delhi to train local hands in the proper management of colonies, making of the bee-hives, extraction, care and marketing of honey. Since bee-keeping is best practised as a subsidiary industry, it will keep the farmers engaged during off-season, besides providing additional income.

Statement I

Statement showing Third Plan Outlay, anticipated expenditure in 1971-72, the proposed and the outlay recommended for 1972-73.

(Rs lakhs)

Name of schemes	Third Plan Outlay	1971-72		1972-73		Remarks
		Approved outlay	Anticipated outlay	Proposed	Suggested	
2	3	4	5	6	7	8
Direction	16.09	4.13	4.06	2.94	4.50	Addl. amount of Rs 1.56 lakhs on account of 3 Regional Annual Husbandry Officer in place of 1 existing post of Dy. Dir.
Livestock Farm, Samchi	10.84	3.06	2.56	3.68		A lump sum amount of Rs 3.50 lakhs has been suggested for the re-organisation, irrigation fencing, strengthening of livestock and the appointment of 3 farm managers
Livestock Farm, Paro	4.59	1.54	1.54	1.56		
Livestock Farm, Bidung	9.39	1.77	1.77	2.69		
Livestock Farm, Thimphu	11.60	3.12	1.88	3.01		
Livestock Farm, Lingmethang	7.18	2.43	2.43	2.85		
Sheep Breeding Farm, Mera/Khaling	6.19	1.66	1.66	1.79		Sheep breeding officer not in position
Mithun Breeding Farm, Thromong	5.60	1.16	1.16	2.06	1.56	Building component to be slowed down. A saving of Rs 0.5 lakh is expected.

Statement I (Contd.)

1	2	3	4	5	6	7	8
9. Livestock Farm, Chirang	9.22	2.39	2.39	2.72			
					<u>20.36</u>	23.86	
10. Vety. Dispy., Samchi	3.03	1.25	0.03	0.35			Vety. Assistant Surgeon in-charge
11. Vety. Dispy, Thimphu	4.08	2.37	2.37	0.45			-do-
12. Vety. Dispy, Paro	3.58	2.74	1.00	0.40			-do-
13. Vety. Dispy, Deothang	2.08	0.24	0.24	0.61			Compounder-incharge
14. Vety. Dispensary, Phuntsholing	2.84	0.94	0.94	0.76			Vety. Asstt. Surgeon incharge
15. MV & Mobile Disp. Sarbhang	6.90	1.87	1.87	0.48			-do-
16. Vety. Disp., Gyelephung	1.86	-	-	-			
17. Vety. Disp, Chirang	4.00	1.28	0.08	0.28			New disp, Compounder incharge
18. Vety. Dispy., Thongsa	1.76	-	-	-			
19. Vety. Disp, Shemgang	1.87	-	-	0.69			To be constructed. To be deferred for 1973-74
20. Vety. Dispy, Kurtey	1.48	-	-	-			
21. Vety. Dispy., Dorakha	1.83	-	-	0.61			To be constructed, may be deferred.
22. Vety. Disp., Wangdiphodrang	1.87	0.70	0.67	0.49		-1.30	
					<u>5.12</u>	<u>3.82</u>	
23. Yak Disease Eradication	1.20	0.27	0.27	0.29			
24. Training in Animal Husbandry	0.30	0.68	0.68	0.57			
25. Disease Investigation Laboratory	2.21	-	-	1.40			
26. Pisciculture	3.21	1.40	1.40	1.00		-0.5	Fisheries Development officer not in position
27. Visit of Experts	0.20	-	-	0.05			
Grand Total	125.00	35.00	29.00	31.73		+3.26	
						= Rs 34.99 lakhs	
						say Rs 35 lakhs.	

Statement II

Targets & Achievements

Name	Unit	1971-74			Third Five Year Plan			
		First Plan	Second Plan	Target	1971-72 Target	1972-73 Achievement	1972-73 Proposed	1972-73 Recommended
	2	3	4	5	6	7	8	9
Livestock Farms -								
Establishment of	Nos.	6	1	1	1	1	-	-
Livestock Farms -								
Expansion of	"	-	-	7	3	2	5	2
Vety. Dispensaries -								
Establishment of	"	4	2	10	2	2	42	-
Vety. Dispensaries -								
Strengthening of	"	-	-	6	1	1	-	2
<u>Distribution of breeding animals</u>								
Bulls	"	-	83	675	135	40	135	130
i) Stallion	"	-	-	15	3	NA	3	3
ii) Rams	"	-	-	250	50	20	50	60
v) Boars	"	-	694	3420	685	145	500	600
Poultry birds	"	-	563	32000	6400	1900	6000	6400
i) Hatching eggs	"	-	-	7000	14000	NA	12000	14000
A.I. performed	"	-	NA	NA	NA	NA	NA	6000
Prophylactic vaccinations	"	-	85865	-	50000	48445	50000	50000
Disease Diagnostic Laboratory	"	-	-	1	1	-	1	1
Training of candidates	"	-	28	40	5	5	5	10
<u>Animals imported</u>								
i) Cattle	"	-	-	-	25	25	-	-
ii) Equine	"	-	-	-	3	3	-	-
iii) Sheep	"	-	-	-	26	26	-	-
v) Pigs	"	-	-	-	-	-	-	-
v) Poultry	"	-	-	-	-	-	-	-
<u>Livestock products</u>								
i) Milk	Lbs.	-	-	-	-	54000	-	-
ii) Eggs	Nos.	-	-	-	-	58200	-	-
iii) Wool	Lbs.	-	-	-	-	110	-	-

Statement-III

Composite Livestock Farms

Location	Areas (acres)	Number of Livestock					Poul-try	Sh- eep	Alti- tude ft.	REMARKS
		Cattle	Pigs	Horses	Mithun					
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	
Eastern Livestock Farm, Bidung	150	26	9	18	-	448	-	4800	Poor soil infested with lemon grass, acute shortage of water, very poor communication and no electricity.	
Sheep Breeding Farm, Mera/Kha- ling.	100 25	-	-	-	-	-	145	11000 7000	Khaling - Lack of irrigation facilities during winter and summer. No scope of expansion. Mera - Fit for summer only. Sheep cannot stay there during winter due to absence of pasture & severe cold. They need migration to lower altitude during winter, communication by mule track.	
Mithun Breeding Farm, Thromong	100	-	-	-	30	-	-	8000	Lack of irrigation facilities. Heavily infested with leech, very poor communication. Mule	

	2.	3.	4.	5.	6.	7.	8.	9.	10.	
										track only. Hence problem of carrying feeds and building materials.
iv) Livestock Farm, Lingmethang.	145	-	36	11	1/2	-	-	-	2500	Flat land. Can be turned into a good farm provided irrigation facilities are made available which is possible. Communication has been improved recently as it has been connected by lateral road with Mongar and Tashigang.
<u>B-Central</u>										
i) Livestock Farm, Chirang.	200	-	-	-	-	-	-	-	4000	Newly acquired land. Requires jungle clearance. Irrigation facility to be provided. Buildings have yet to come up.
<u>C- Western</u>										
i) Livestock Farm, Paro	32	-	31	-	-	1100	-	7500		Area limited, no scope of further expansion of farm area. Irrigation facility will be provided shortly, for which action is in hand. Sufficient scope for poultry and piggery expansion.
ii) Livestock Farm, Thimphu.	92	101	48	2	-	136	-	7800		Great scope for expansion. Some additional buildings will be required. To keep liver fluke infestation in check, regular drenching with anthelmintics is carried out.
iii) Livestock Farm, Samchi (1962)	100	98	62	-	-	2009	-	1500		No scope for further expansion. No irrigation facility. Area heavily infested with ticks.

CHAPTER VI - POWER

The approved outlay of Rs. 53 lakhs for the Annual Plan 1971-72 on electricity schemes has been almost fully utilized. During this year Samdrup-Jongkhen and Saribhong were electrified. The third machine at Wangdiphodrang hydel was commissioned. A Mini-hydel scheme at Gonichawa was executed. As a result, the total hydro-potential of connected supplies has arisen from about 1,000 k.w. at the beginning of the Third Five Year Plan to 1,700 k.w. at the end of the first year of the Third Five Year Plan. In all 11 places have been electrified so far. The work on Tashigang Hydro-electric project was in advanced stage of completion. The proposals for the year 1972-73 were discussed with the concerned officials of the Bhutan Government and an outlay of Rs. 52.50 lakhs is recommended for the year 1972-73 in respect of the following schemes included in the Third Five Year Plan of Bhutan.

1972-73 outlay

	(Rs. lakhs)
1. IV Direction	1.52
2. W/Phudrong Hydel Project	1.43
3. Tashigang Hydel Project	4.83
4. Gidkom Hydel Project	12.62
5. Investigation & Miscellaneous	6.10
6. Mongar Hydel Project	5.00
7. Transmission and Distribution	20.00
<u>Total</u>	<u>52.50</u>

6.2 With the provision recommended, the Tashigong Hel Project will be commissioned during the year. Work on construction of Geda Hydel scheme which was started in 1971-72 will be continued. This project is scheduled to be completed in 1973-74. Work on Mongr Hydel Project will also be taken in hand. In addition, Jothang will be connected to Assam Grid. The investigations for Tongsa HA CHU are proposed to be commenced in 1972-73. On transmission lines, the progress is satisfactory. Against the five year outlay of Rs. 195 lakhs, expenditure in 1971-72 amounted to Rs. 17.78 lakhs and an outlay of Rs. 20 lakhs is recommended for 1972-73. Since this is a high priority scheme, Bhutan Government should give close attention to the completion of this programme according to schedule.

6.3 Chuka Hydro-electric project has been accepted by the Government of India in principle. This project is estimated to cost Rs. 35 crores and will have installed capacity of 320 M.W. A decision is yet to be taken in regard to the extent and nature of the participation by the Government of India and the Government of Bhutan in the cost as well as the benefits from this project and also the agency which will execute this project. The Honourable Development Minister, Bhutan indicated in the discussions that Government of Bangladesh was also interested in getting power from this project. This matter should be finalised on a priority basis. Pending a decision on these issues, a token provision of Rs. 10 lakhs is recommended in the Annual Plan 1972-73 for starting preliminary work thereon. The total outlay recommended on Power schemes for 1972-73 would amount to Rs. 62.5 lakhs.

CHAPTER VII - INDUSTRY & MINING

The Third Five Year Plan of Bhutan envisages an outlay of Rs. 163.35 lakhs for Industry & Mining sector. Against the approved outlay of Rs. 30 lakhs in 1971-72, an expenditure of about Rs. 28.77 lakhs was reported. Detail-wise schemes of the Third Plan outlay (original, approved outlay and anticipated expenditure by individual schemes) are shown in the statement enclosed. It will be observed that progress has been made on match factory, handicrafts designs and development sectors and mineral development. A sum of Rs. 16 lakhs was also spent as industrial loans outside the Plan out of the funds to the extent of Rs. 60 lakhs made available by the Government of India for commercial ventures before the finalisation of the Third Five Year Plan of Bhutan.

7.2 In the inaugural meeting between the Planning Committee of Bhutan and the Technical Team of the Planning Commission, as indicated in the introductory chapter, His Royal Highness, Minister for Trade, Industries & Forest stated that at the time of the formulation of the Third Five Year Plan, enough thought had not been given to the schemes necessary for the development of industries in Bhutan. During the last one year, they could give greater attention to this subject and consequently many new schemes considered essential for the development of industries had now been prepared which should be included in the Plan. He added that during the last one year very good climate has been built up in Bhutan for development of industries and any shortage of funds at this stage would

kill the tempo of industrialisation. He, therefore, suggested that the Technical Team should consider the revised proposals on merit and not confine itself to the proposals which had been earlier included in the Third Five Year Plan.

7.3 The revised proposals for the development of industries in the Third Five Year Plan, as circulated in the meeting of the Planning Committee indicated an outlay of Rs. 103.08 lakhs for the year 1972-73. These proposals were discussed at length in a meeting between His Royal Highness the Minister for Trade, Industries & Forest and the leader of the Technical Team. The officials of the Industries Department Bhutan and Shri N.N. Agarwal, member of the Technical Team were also present. In the following paragraphs, the progress of individual schemes in 1971-72 has been reviewed and the proposals for 1972-73 examined and recommendations of the Team indicated.

7.4 I. Large and Medium Industries

(1) Industrial Surveys:

For the Third Plan there is a provision of Rs. 25 lakhs for industrial surveys. For the year 1971-72 a provision of Rs. 5 lakhs had been made but the actual expenditure was only Rs. 0.93 lakhs as follows:-

	(Rupees)
(a) For the setting up of a small scale cement plant (part payment)	25,000
(b) For the slate and marbles projects (Part payment)	5,000
(c) Rosin, Turpentine, Lemon Grass, Oil etc. Projects	63,000
(d) Activated Carbon	63,000
(e) Expenditure on survey teams for small-scale industries etc.	93,000
<u>Total</u>	<u>93,000</u>

7.5 Various surveys are in progress which are expected to be finalised during 1972-73. A provision of Rs. 2.60 lakhs would be needed for surveys in hand as indicated below

	(Rupees)
(a) Small-scale cement plant	40,000
(b) Manas Valley Forest-based industries	10,000
(c) Technical magnesium carbonate and other chemical plants	50,000
(d) Lemon grass oil survey	50,000
(e) Slate and marble deposit survey	10,000
(f) Gypsum and sulphur survey	1,00,000
<u>Total</u>	<u>2,60,000</u>

7.6 The Bhutan Government also desire some funds may be provided for initiating new surveys during 1972-73 and various items were under their consideration. A lump sum provision of Rs. 90,000 is considered necessary for these new surveys. The total provision for the year 1972-73 under the head "Industrial Surveys" would therefore be Rs. 3.50 lakhs.

7.7 The Team would like to suggest that there should be better planning and coordination in the matter of surveys and preparation of project reports. For example, when a large-scale cement plant which will more than meet the requirements of Bhutan is already under consideration and for which even a Detailed Project Report has been prepared, it has to be carefully considered whether there is a need for initiating a Project Report on a small scale Cement Plant on which Rs. 65,000 will be spent. Similarly, the survey conducted by the Development Commissioner (SSI) included Slates, Marbles, Lemon Grass Oil,

Rosin, Turpentine, etc. It is understood that Surveys and Project Reports by some consultants have been arranged. This would be somewhat a duplication of effort and expense unless separate terms of reference have been explicitly laid down. It may also be desirable to entrust surveys and the preparation of feasibility reports to recognised institutes rather than to private individuals, however qualified.

(2) Fruit Preservation Unit, Samchi

7.8 A provision of Rs. 5 lakhs had been made in the Third Plan for this project. At the beginning of the Third Plan, it was decided to give this project on lease to an experienced entrepreneur since it had been running at a loss. For the year 1971-72, Rs. 3 lakhs had been earmarked for further investment on this project. The actual investment by way of expansion of buildings and installation of additional equipment for processing of pine-apple was Rs. 0.95 lakhs only. For the year 1972-73, the Bhutan Government desired a provision of Rs. 2 lakhs for this project - Rs. 1 lakh for construction of storage buildings and Rs. 1 lakh for purchase of additional plant and equipment. The proposals are under implementation - the investment of Rs. 2 lakhs appears necessary.

7.9 The Government of Bhutan now desire to set up a second Fruit Preservation Unit in the eastern region with the assistance of JFTPI and in collaboration with TAFAS. This appears reasonable having due regard to the conditions in respective areas and difficulties of packing and transporting fresh fruit over distances. The investment on this factory during the Third Plan is estimated at Rs. 5 lakhs and in 1973-74 Rs. 1.00 lakhs.

7.10 The Bhutan Government therefore desire that the allocation of Rs. 5 lakhs made for the fruit preservation unit for the Third Plan should be increased to Rs. 8 lakhs, out of which Rs. 3 lakhs would be invested on the existing unit at Samchi and another Rs. 5 lakhs on the second unit in the eastern region. From out of these Rs. 8 lakhs, Rs. 0.95 lakhs were spent in 1971-72 and Rs. 3 lakhs would be spent in 1972-73. The proposal for the second fruit preservation unit in the eastern zone may be agreed to in principle subject to the condition that the additional sum of Rs. 3 lakhs needed for this scheme should be found from savings under some other scheme in the Third Plan. For the year 1972-73, a provision of Rs. 3 lakhs appeared reasonable.

7.11 According to the present arrangement, the fruit preservation factory has to give royalty to the Bhutan Government. The royalty in 1971-72 was Rs. 40,000 and in 1972-73 it would be Rs. 45,000. The net profits during 1971-72 were Rs. 40,000 which are expected to increase to Rs. 1 lakh during 1972-73.

II. Village and Small Industries

(1) Administration and Office Expenditure

7.12 For administration and office expenditure, a provision of Rs. 25 lakhs had been made for the Third Plan and the allocation for 1971-72 was Rs. 5.77 lakhs, against which the expenditure amounted to Rs. 7.63 lakhs, out of which Rs. 5.43 lakhs were spent on the staff of the Directorate of Industries and Rs. 2.20 lakhs on the staff of the Secretariat. The expenditure under this head appears to be high. It is suggested that the

proliferation of the staff should be avoided especially in the higher levels and there should be more of trained staff. The Bhutan Government suggested the appointment of Regional Industries Officers and Industrial Inspectors who could inter-alia carry on the small surveys needed from time to time and also process the loan applications and take follow-up action both at the time of grant of the loans and realisation of the instalments. The appointment of two Regional Industries Officers and two Investigators may be agreed to. There is a need for avoiding duplication of staff. For example, in Phontsholing, the Ministry of Industry had appointed one person as Industries Officer and another as Liaison Officer. There was hardly any work for two posts. In view of the appointment of the Industries Officer, the post of Liaison Officer had become redundant and could be done away with. A similar scrutiny was needed in the case of all other Secretariat, Directorate and field posts.

7.13 The recurring expenditure on staff including that on additional staff indicated above may be reduced to Rs. 5 lakhs. For the Regional Officers and Investigators as well as for the Officers at the headquarters it was necessary to construct some buildings for which an allocation of Rs. 3 lakhs was essential. Therefore under the head "Administration and Office Expenditure" a provision of Rs. 8 lakhs for 1972-73 might be made.

(2) Financial Assistance to Small Industries

7.14 For the Third Five Year Plan a provision of Rs. 25 lakhs had been made for loans to industrial units. As a result of the efforts made by the Bhutan Government there is good climate for the setting up of industries in the private sector. The Nanjappa Committee which carried out a survey of Bhutan for the Development

of small scale industries has also suggested that adequate finances should be made available for the development of small-scale industries. During the year 1971-72, the Bhutan Government has given loans to about 50 entrepreneurs to the tune of Rs. 21 lakhs. The industries covered are of varied nature, such as, aluminium utensils, tyre retreading, safety matches, woollen hosiery, bakery and biscuits, wooden furniture, barbed wire, oil pressing, cane furniture, ready-made garments, etc. The expenditure is far in excess of the Plan provision. Enquiries made on the subject revealed that the Government of India had granted a loan of Rs. 60 lakhs to the Government of Bhutan for the setting up of a Tea Estate. This proposal had not matured and the Bhutan Government had diverted funds for grant of loans to industries from this amount of Rs. 60 lakhs.

7.15 According to the commitments already entered into and the fresh requirements, the Government of Bhutan estimated their requirements for loans to industries during 1972-73 at Rs. 17.50 lakhs which is again a very substantial increase over the Plan provision and cannot be accommodated within the funds allocated to the industries sector for the Third Plan.

It is desirable that the private initiative built for the setting up of industries is not killed by reducing loan assistance. It is suggested that the loan assistance Rs. 17.5 lakhs may be given out of the balance of Rs. 44 lakhs from the loan of Rs. 60 lakhs given by the Government of India outside the Third Plan of Bhutan.

(3) Handloom Development Schemes

7.16 In the Third Plan only one scheme had been included for the training of handloom weavers for which a provision of Rs. 1.5 lakhs had been made. Handloom industry is the most important industry of Bhutan which employs the largest number of people. The Team led by Shri K.L. Nanjappa had also suggested the development of this industry on sound lines. The Plan provision of Rs. 1.50 lakhs was considered grossly insufficient for undertaking any scheme which could have its impact. The Bhutan Government had already taken action to establish two training centres, one in Tashigang and the other Tongsa where 17 trainees were to be trained. The Government proposed to give proper shape to these two centres and to set up a third centre at Thimpu. Each of these centres would have one Weaving Superintendent, one Inspector and two Demonstrators. The Demonstrators would also undertake field supervision and ensure proper utilisation of the loans by the ex-trainees. The expenditure on this scheme would therefore be about Rs. 16 lakhs in the remaining 4 years of the Plan, out of which Rs. 8 lakhs would be on staff and training and Rs. 8 lakhs on buildings and equipment. For the year 1972-73 an expenditure of Rs. 9 lakhs is recommended - Rs. 7.70 lakhs on buildings and equipment and Rs. 1.30 lakhs on staff and training. The expenditure on buildings and equipment during 1972-73 would meet the requirements for the entire Third Plan. Including the expenditure of Rs. 2.40 lakhs incurred during 1971-72, the total provision required for this scheme comes to Rs. 18.40 lakhs during the Third Plan period as against the earlier provision of Rs. 1.5 lakhs. The additional provision to the tune of Rs. 16.90 lakhs will have, therefore, to be found by diversion from other heads of development by suitable adjustments.

(4) Handicrafts Emporium and Other Handicrafts Schemes

7.17 The Third Five Year Plan includes a provision of Rs. 21.52 lakhs for two schemes under handicrafts, namely, (i) for Handicrafts Emporia Thimpu, Wood-working Centre Paro, Handloom Centre Tashigang and Fine Arts Centre Thimpu Rs. 11.52 lakhs, and (ii) for Handicrafts Design and Development Centre Rs. 10 lakhs. The Government of Bhutan have so far taken up three schemes for the development of handicrafts, namely, Emporia and Work Centre at Thimpu, a Wood Working Centre at Paro and a Bamboo Working Centre at Jhankar. The scheme relating to handicrafts design and development centre has not so far been taken up.

7.18 During 1971-72, the expenditure on development of handicrafts was Rs. 5.50 lakhs. For the year 1972-73, an outlay of Rs. 9.00 lakhs would be necessary since buildings for these ^{three} centres and the staff quarters will have to be completed. The outlay on buildings and equipment during 1972-73 is estimated to be Rs. 6.50 lakhs and on staff and training Rs. 2.50 lakhs.

In view of the additional outlays required for the various schemes, mentioned above, the Bhutan Government may consider the desirability of postponing the schemes/ for the setting up of Handicrafts Design and Development Centre.

(5) Industrial Estates

7.19 There is a provision of Rs. 29 lakhs in the Third Plan for the construction of an Industrial Estate

at Phontsholing. The work on this Industrial Estate was started in 1971-72 and an expenditure of Rs. 5.15 lakhs was incurred entirely on the construction of a bridge and the approach roads across the river Torsha - total outlay will be about Rs. 13 lakhs. This will enable the Bhutan Government to develop an area of about 350 acres in Phontsholing, out of which only 50 acres will be needed by the proposed Industrial Estate. It will therefore be desirable that this sum of Rs. 13 lakhs is not debited to the Industrial Estates but included in the road building expenditure of the Bhutan Government. The addition of Rs. 13 lakhs in the expenditure on Industrial Estate will greatly inflate its cost and the rents of the sheds fixed on that basis will be uneconomical to the industrial units. Since this bridge and the roads will help the Government to reclaim 350 acres at an important developing point, the cost of Rs. 13 lakhs should be debited to the programme of either the road development or to that of the town planning. The Bhutan Government should decide the question of proper allocation of this expenditure at the earliest. Since the work on the road and bridge has already started, it will not be desirable to stop it in the middle. For the next year (1972-73) a provision of Rs. 5 lakhs appeared necessary.

7.20 The Government of Bhutan also wish to develop industrial areas in Gaylephu and Sandrup Jhonkar. Gaylephu is very near Bongaon, where the second Oil Refinery is to be set up in Assam. This area, therefore, offers good scope for development of a number of ancillary units. In view of the limited financial resources, the Bhutan Government was advised to undertake

development of the industrial area in Gaylephu only during the Third Plan and to postpone the Sandrup Jhonkar proposal to the Fourth Plan. For developing the industrial area at Gaylephu, an expenditure of Rs. 5 lakhs would be required and the entire expenditure would be incurred during 1972-73 only.

Therefore under the head "Industrial Estate and Areas" a provision of Rs. 10 lakhs may be made for the year 1972-73.

(6) Distribution of Improved Tools

7.21 There is a provision of Rs. 5 lakhs under this head in the Third Plan. During 1971-72, Rs. 60,000 were spent against an allocation of Rs. 1 lakh. After discussions it was agreed that distribution of improved tools should be on hire-purchase basis and it should be taken up as a commercial scheme of the Bhutan Government. There would however be some minor tools and equipment which will have to be given to the carpenters and loom-weavers and other personnel trained in the various training centres. These would be of a very minor order and a provision of Rs. 10,000 for the year 1972-73 may be sufficient.

(7) Training Programmes

7.22 The Third Plan includes a provision of Rs. 10 lakhs for the training programmes for industrial purposes in Bhutan and outside. Against a provision of Rs. 5,000 in 1971-72 only an expenditure of Rs. 60,000 has been incurred. The Bhutan Government submitted proposals for the setting up of 3 industrial centres at Tashigang, Shengacon Dzong and Dechenlong. It was found difficult to accommodate all these proposals within the Third Plan ceiling, and the Bhutanese Government has therefore been advised to set up only one Industrial Training Centre in Shengacon Dzong.

During 1972-73, only one Centre in Shemgaon may be started to train about 20-25 persons in blacksmithy, plummery, turning and masonry. Illiterate persons may be recruited to this Training Centre which will provide training in house-building and allied activities. These skills are very scarce in Bhutan and the building programmes are delayed for want of skilled labour.

The outlay on this training Centre during 1972-73 may be fixed at Rs. 3.80 lakhs out of which Rs. 3.30 lakhs may be on building and equipment and the balance Rs. 0.50 lakhs on staff and contingencies. A part of this allocation may be utilised for training of Bhutanese in-India.

(8) Participation of Bhutan in Asia 1972 and other Exhibitions

7.23 This scheme had not been included in the Third Five Year Plan. In view of the recent developments, it appears necessary that the Bhutan Government takes part regularly in Exhibitions like Asia 1972 being held in Delhi and other exhibitions particularly to popularise their handicrafts and handlooms. Participation in the exhibitions will help in improving the demand for Bhutanese products and this may in turn give a fillip to the increased production of Bhutanese handicrafts and handlooms. For the remaining four years of the Third Plan, a provision of Rs. 3 lakhs appears necessary. Rs. 1 lakh may be provided in 1972-73.

(9) Power Subsidy

7.24 The power rates in Bhutan are very high - about Rs. 0.40 per unit. With the development of small mechanised units there is a demand for supply of power at cheap rates. This will take some time before power becomes available in plenty in Bhutan and at reasonable prices. There was a prolonged

discussion on this item and the Team generally did not favour giving of subsidy of any sort since such a policy makes the industrial units very much deficient in subsidies of all types. In Bhutan it will be desirable ^{to} develop a psychology among the entrepreneurs to set up and run units under the prevailing conditions and stand on their own feet. Moreover, the net impact of the power charges in the total cost of production is very small, and as such the subsidy on power does not have any perceptible effect on the cost of production or on profits. On the other hand, it leads to the deployment of resources which the Government can utilise for important development schemes.

7.25 However, since Bhutan has yet to make a beginning in industrial development it was agreed that a scheme for power subsidy may be introduced but subsidy should be given very sparingly in some deserving cases where power charges form a major part of the production cost and subsidy on power is essential for the very survival of the project. Considering this aspect, a provision of Rs. 50,000 may be made for this scheme for the remaining years of the Third Plan and Rs. 10,000 may be provided for this purpose for the year 1972-73.

Cement Corporation of Bhutan

7.26 The Third Plan of Bhutan does not include any provision for setting up of a Cement Corporation at Pagli and setting up of a Mineral Development Corporation nor the draft proposals for the Annual Plan 1972-73 of the Government of Bhutan included any provision for these two schemes.

It has since been decided to establish a cement manufacturing plant with a capacity of 300 tonnes per day at Pagli in the joint sector in which India and Bhutan shall join. Detailed project report for this Corporation is ready. A new Cement Corporation may be established with 51 per cent ownership of Bhutan and 49 % ownership of India. For the year 1972 a sum of Rs. 25 lakhs may be provided in the Plan of Bhutan for undertaking the initial work in respect of the establishment of this project.

In view of a project for manufacture of cement to be set up in the large scale sector with a capacity of 300 tonnes per day which will more than meet the requirements of Bhutan, there hardly appears any scope for any mini cement plant at Paro or any other place.

Minerals Development Corporation

7.27 Surveys and Investigations are already in progress for establishing the commercial exploitability of the various valuable minerals known to be available in Bhutan. It will be useful if a Mineral Development Corporation to commercially exploit ~~the~~ the minerals whose detailed project reports are ready is established. This Corporation could also be in the joint sector in which India and Bhutan can cooperate - more or less on the lines of the Cement Corporation of Bhutan.

For the year 1972-73, a sum of Rs. 5 lakhs may be provided in the plan of Bhutan for the initial expenses connected with the establishment of this Corporation and for taking up the commercial exploitation of gypsum, dolomite or any other mineral whose detailed project report is ready.

Non-Plan Schemes:

Industrial loans:

7.28 The Government of India had granted a loan of Rs. 60 lakhs for the setting up of a Tea Estate in Bhutan. This proposal did not materialise. In 1971-72 the Bhutan Government gave industrial loans to the tune of Rs. 21 lakhs as against the Plan provision of Rs. 5 lakhs by diverting funds from this loan. As such, Rs. 16 lakhs have already been used for financial assistance to the industry. For the year 1972-73, the Bhutan Government need Rs. 17.50 lakhs for loans to the industry. This amount may also be permitted to be utilised from out of the loan of Rs. 60 lakhs. As such, Rs. 33.50 lakhs will be diverted to the industrial loans fund.

Raw Materials, Machine & Equipment Depot

7.29 The Bhutan Government proposes to purchase raw materials and machines & equipment from India and supply the same to industrial units in Bhutan. There can be no two opinions that such a Depot is basically necessary for the proper working of the industrial projects in Bhutan. The capital provided to this Depot shall have very quick rotation. It is felt that a sum of Rs. 5 lakhs would be sufficient to meet the working capital requirements of the proposed Depot. The Bhutan Government should add enough margin for the overheads, management of the Depot and expected losses due to any reason so that the capital provided to this Depot is not depleted in any manner. In fact it shall be helpful if a little margin is added for increasing the activities of the Depot further and for building up its capital.

This will be a trading scheme and a sum of Rs. 5 lakhs may be provided from out of the loan of Rs. 60 lakhs. This would bring the outlay to be met from Rs. 60 lakhs loan outside the Plan, to Rs. 58.5 lakhs, leaving an unspent balance of Rs. 21.5 lakhs

To sum up:

7.30 The Third Plan allocation for Industry and Minerals Development would need revision in view of the changed requirements of the schemes already included in the Plan and on account of the inclusion of the new schemes in the Plan - setting up cement factory and Mineral Development Corporation. The exact requirements will have to be worked out later when the revised requirements of funds for industrial schemes and firm requirements of new schemes are clearly known.

An outlay of Rs. 77.5 lakhs is recommended for 1972-73 for various schemes in this sector (details given in the enclosed Statement).

An outlay of Rs. 22.5 lakhs is also recommended for two schemes outside the Plan - Industrial Loans and for setting up of a Raw Material, Machine and Equipment Depot. This may be met out of the loan of Rs. 60 lakhs made available by the Government of India before the commencement of the Bharat's Third Five Year Plan. Taking into account Rs. 16 lakhs already utilised in 1971-72 the unspent balance out of Rs. 60 lakhs loan comes to Rs. 21.5 lakhs.

Annual Plan for Bhutan for 1972-73 - Industries & Mineral Sector

(Rs. Lakhs)

Sl. No.	Name of the Scheme	Total 1971-72		Anti-Period		Pro-Period		Recommendations of the Technical Group		Additional Expenditure		Additional Employment	Total
		Jan	Approved	period	period	Technical	Gap -	Build-	Pre-	ing	Indians		
		outlay	outlay	Expend	Expend	outlay	outlay	Gap -	Build-	Pre-	ing	Indians	Employment
		Original		1971-72	1972-73	1972-73	1972-73	Build-	Pre-	ing	Indians	Employment	
I. Large and Medium Industries													
1.	Industrial Surveys	25.00	5.00	0.93	6.50	3.50	3.50	-	-	-	-	-	-
2.	Fruit Preservation Units	5.00	3.55	0.95	3.00	3.00	1.50	1.50	-	-	-	30	10
3.	Match Splinters Factory	13.33	3.00	Nil	2.00	(2)	-	-	-	-	-	-	-
4.	Cement Corporation of Bhutan	-	N.A.	N.A.	N.A.	25.00	-	-	-	-	-	-	-
	Total	43.33	11.55	1.88	11.50	31.50	5.00	1.50	-	-	-	30	10
II. Mineral Development													
	Mineral Development Corporation	3.00	0.20	-	-	3.00	-	-	-	-	-	-	-
	Total	3.00	0.20	-	-	3.00	-	-	-	-	-	-	-
III. Village & Small Industries													
1.	Office expenditure	25.00	5.77	7.63	7.00	8.00	-	3.00	-	-	5.00	6	4
2.	Financial assistance to small industries	25.00	5.00	5.00	15.00	(b)	-	-	-	-	-	-	-
3.	Handloom Development Schemes	1.50	0.30	2.40	9.10	9.00	0.10	7.60	-	-	1.30	5	2
4.	Handicrafts Emporium and Other Handicrafts Schemes including Emporium at Dalhid	11.52	3.93	5.50	20.68	9.00	0.50	6.00	-	-	2.50	3	1
5.	Industrial Estate	29.00	0.20	5.16	15.20	10.00	-	10.00	-	-	-	-	-
6.	Distribution of improved tools	5.00	1.00	0.60	1.50	0.10	0.10	-	-	-	-	-	-
7.	Industrial training programme	10.00	0.05	0.60	6.40	3.80	0.30	3.00	-	-	0.50	5	21
8.	Asia 1973 & other Exhibitions	Nil	Nil	Nil	Nil	1.00	-	-	-	-	1.00	-	-
9.	Subsidy on power, etc.	Nil	Nil	Nil	16.70	0.10	-	-	-	-	0.10	-	-
10.	Handicrafts Design & Development Centre	10.00	2.00	-	-	-	-	-	-	-	-	-	-
	Total	100.00	20.00	26.88	91.58	41.00	1.00	29.60	-	-	10.40	19	28

Anticipated expenditure 1971-72	Recommended outlay 1972-73
16.00	17.50 5.00

IV. Non-Plan Schemes

Industrial Loans
Raw Materials & Machinery Depot. }

* The anticipated expenditure as furnished during the discussions in Bhutan was Rs. 28.48 lakhs

(a) The Match Splints Factory is proposed to be set up in the private sector and the Bhutan Govt. will assist this factory with an industrial loan only. The required amount of loan has been included in the outlay under the heading "Industrial Loans".

(b) During 1971-72 the loans actually disbursed were Rs. 21 lakhs. Out of this, Rs. 5 lakhs which was the Plan provision have been shown as the Plan expenditure and the remaining Rs. 16 lakhs have been taken as non-Plan expenditure.

Chapter VIII - Transport and Communications

Against the Five Year Outlay of Rs 691 lakhs for road works, an outlay of Rs 147.50 lakhs was recommended for 1971-72 against which the expenditure reported by the Planning Department was Rs 132.56 lakhs. There were considerable shortfalls in expenditure on new road works and projects whereas excess expenditure was incurred on construction of residential and non-residential buildings. The proposals for 1972-73 were discussed in detail with the Chief Engineer, P.W.D. In the light of the progress recorded in respect of individual works in 1971-72 and the feasible achievement in 1972-73, it is recommended that an outlay of Rs 110 lakhs may be accepted for this programme.

8.2 Including the debit raised by the Government of India to the extent of Rs 58 lakhs on account of Tashigang-W Phudrang motorable road, for which Third Plan included a provision of Rs 80 lakhs to be paid to Border Road Organization who were responsible for the construction of this road, the expenditure in 1971-72 was Rs 190.56 lakhs. For the year 1972-73, the table below indicates the break-up by major category of works of the recommended outlay for 1972-73 in relation to the anticipated expenditure 1971-72 and the five year provision.

(Rs. in lakhs)

Schemes	Plan provi- sion 1971-76	1971-72		1972-73	
		Appro- ved	Antici- pated	Propo- sed	Recommended
<u>Roads</u>					
Spillover	276.00	57.00	52.1	50.0	50.0
New	260.00	58.50	18.4	40.0	30.0
Bridges	55.00	15.00	0.4	15.00	5.00
Rest Houses	20.00	4.00	4.8	4.00	4.00
Construction of residential and non-residential build- ings	25.00	5.00	4.00*	4.00*	3.00
Purchase of Mechanical equipment	Nil	Nil	5.7	10.00**	10.00**
Maintenance of Roads Mechanical equipment and buildings	55.00	8.00	19.00	11.00	8.00
Establishment	-	-	19.6@		

*Tentative. ** To be distributed on other items. @ To be distributed over other works.

There was no separate provision for establishment in the Third Five Year Plan and, therefore, no provision could be recommended in 1972-73; the provision has to be made in respect of works programme. The balance of the provision for the four years 1972-76 is Rs 5.0 crores (Rs 6.91 crores-Rs 1.91 crores). Allowing for a progressive increase in the tempo of expenditure in the successive years, an outlay of Rs 110 lakhs for

1972-73 should be regarded as reasonable. Statement I enclosed indicates the details by individual schemes of the progress made in 1971-72 and the anticipated achievement in 1972-73.

Road Transport

8.3 Against the Third Plan provision of Rs 69 lakhs under this head of development, Planning Commission Team had recommended an outlay of Rs 10 lakhs for 1971-72. In the discussion with the Honourable Finance Minister and the Financial Adviser in the Ministry of Finance, it was pointed out that the actual expenditure incurred in the year amounted to Rs 20.65 lakhs as indicated below:

(i) Construction of head office building at Thimphu and garages, booking offices, passenger sheds, workshops, staff quarters, check posts etc. at different places in the country	Rs.9,28,088
(ii) Purchase of vehicles and body building	Rs.10,88,549
(iii) Purchase of machinery and equipments	48,235
<u>Total: Rs.20,64,872</u>	

The above expenditure figures are inclusive of the cost of replacement of the old vehicles for which a provision of Rs 66 lakhs was made for the five year period outside the

Plan. The exact extent of replacement of vehicles was not readily available. Financial Adviser agreed to have these figures worked out separately. In the meantime, as advised by him, an expenditure of Rs 10 lakhs has been estimated for 1971-72. An equal amount has been provided for 1972-73. As mentioned in the Chapter on financial resources, the Finance Ministry would work out the balance-sheet of the working of the BRTS so as to find out the contribution of BRTS for financing the Annual Plan, the amount of depreciation, available etc.

Posts and Telegraphs

8.4 Against the Annual Plan outlay of Rs 22 lakhs for 1971-72, the expenditure was of the order of Rs 20.12 lakhs. For 1972-73, an outlay of Rs 28.35 lakhs was proposed for various schemes of the P & T Department. These schemes were discussed in detail with the Secretary Communications and other concerned officials. It is suggested that an outlay of Rs 24.5 lakhs may be provided for development schemes of this Department in 1972-73. (Statement II). The detailed break-up by schemes is shown in the enclosed statement.

Third Five Year Plan of Bhutan included a provision of Rs 20 lakhs for establishment of three new telephone exchanges. In the discussion, Secretary Communication

mentioned that according to the Border Road Organisation, this scheme will cost Rs 29 lakhs. Besides, they had drawn 50 persons to man these new telephone exchanges. Since none of the telephone exchange has come into existence, the Government of Bhutan has to incur the expenditure on their salaries etc. Earlier, Director Communication had suggested that if these telephone exchanges were to be set up by the Government of Bhutan, the cost would be about Rs 15 lakhs i.e. Rs 5 lakhs for each telephone exchange. Allowing for the increase in the cost escalation, a provision of Rs 8 lakhs is recommended for 1972-73 to enable the Government of Bhutan to set up one telephone exchange at a cost of Rs 6.5 lakhs and to meet the cost of salary for 50 persons mentioned above. The position of this programme may be reviewed next year in the light of the progress made during this year and if the provision of Rs 20 lakhs is not sufficient to set up three new telephone exchanges, then the telephone exchange at Punakha may be deferred to the Fourth Plan unless sufficient funds could be found by savings under other heads of development. A provision of Rs 1 lakh has also been included in the recommended outlay of Rs 24.5 lakhs for expansion of Post and Telegraph Department.

8.5 The Technical Team on the Third Five Year Plan of Bhutan had suggested that P & T Department should take necessary steps to reduce the gap between actual receipts and actual expenditure through appropriate measures e.g. efficiency in the operation, enhancement of postal rates etc. so that at the end of the Third Five Year Plan the maintenance cost will be covered by current earnings. Attention of the Secretary, Department of Communication was drawn to this specific recommendation. It appeared that no action has been taken to implement the suggestions. It is strongly commended that urgent measures may be initiated in this regard, and the position might be reviewed at the time of the formulation of the next year's Plan.

Tourism

8.6 In the Third Plan of Bhutan, provision of Rs 17 lakhs has been made for tourist's cottages at Thimpu and Paro and Rest House at Phontsholing and an outlay of Rs 3 lakhs was recommended for 1971-72. No expenditure has been incurred on these schemes in 1971-72. It is understood that an expert team of the Government of India visited Bhutan in May last to make a quick survey of tourism in Bhutan and to make recommendations for the development of tourism in the country. The report

of the ~~Team is still not available~~. The Government of Bhutan proposed an outlay of Rs 10 lakhs for 1972-73 for carrying out the repairs at the Clothong Guest House, Paro. This proposal was discussed with the Hon'ble Finance Minister in his Chamber. He agreed that a provision of Rs 3 lakhs might be made in the Annual Plan 1972-73 for the renovation of Clothong Guest House at Paro. The Government of Bhutan are very keen to develop tourism in the country and they are thinking in terms of Class I hotels at Thimpu and Phontsholing. The entire question whether it will be better to start two big hotels at Thimpu and Phontsholing or a number of small beautiful cottages with local beautiful artistic designs and interior decorations, should be considered and carefully examined in the light of the recommendation of the Expert Team of the Government of India and other relevant considerations.

Pending such examination, a lump provision of Rs 5 lakhs is recommended for 1972-73 and this provision may be utilised only when a firm decision has been taken on the type of the tourist facilities to be provided at Thimpu and Phuntsholing.

Third Five Year Plan & Annual Plan 1972-73 - Bhutan

(in Rs. lakhs)

Roads

Roads	1971-76	1971-72		1972-73	
	Recommen- ded	Recomm- ended	Likely expen- diture	Propo- sed by Bhutan Govt.	Recomm- ended outlay
<u>Roads</u>					
<u>Continuing</u>					
Sarbhong Chirang Motorable Road	87.00	25.00	36.36		20.00
Approach Road to Tala	22.00	10.00	5.12	40.00	10.00
Approach Road to Loloysa-Punakha	40.00	15.00	7.39		15.00
Tashigong-Bhiglung Road	47.00	7.00	2.73		5.00
Tahalempho-Wangdip.nodrang Motorable	80.00	-			-
<u>New</u>					
Roads within Chirang Valley	40.00	8.00	0.04		5.00
Samchi-Deorakhs Motorable Road	-	-			
Approach Road to Nangkur gypsum deposits	-	-		40.00	
Improvement of approach roads to Border towns (51 miles)	50.00	10.00	0.99		10.00
Construction of internal roads - Important Towns					
a) Thimphu	-				
b) Phantsholing					
c) Sarbhong					
d) Galogphug	50.00	10.00	17.37		12.50
e) Paro					
f) Tashigong					
g) Doothang					
h) Haa					
i) Gidakom					
Survey & construction of Punakha-Bovthoka Road					
Survey and construction of Khangijhung to Radi Survey of:					
a) Chirang-Wangdiphudrang Road					
b) Tashigang-Tas.Miyangtsi Road	120.00	29.50	-		2.00
c) Other feeder roads to be selected later					0.50
Improvement of Mule tracks and survey of new schemes	-	1.00			
<u>Total</u>	<u>536.00</u>	<u>115.50</u>	<u>70.50</u>	<u>90.00</u>	<u>80.00</u>

Statement-I(Contd.)

(Rs. in Lakhs)

	<u>1971-76</u>	<u>1971-72</u>	<u>1972-73</u>		
	Recomm- ended	Recomm- ended	Likely expen- diture	Propo- sed	Recomm- ended
<u>Bridges</u>					
Construction of Bridle Road Suspension	50.00	12.00			
Protection work Punakha Dzong	2.00	2.00	0.40	15.00	5.00
Construction of minor bridge on mule tracks	3.00	1.00			
	<u>55.00</u>	<u>15.00</u>	<u>0.40</u>	<u>15.00</u>	<u>5.00</u>
Construction of Rest House	20.00	4.00	4.80	4.00	4.00
Construction of residential and non-residential buildings	25.00	5.00	18.00	4.00	3.00
	<u>45.00</u>	<u>9.00</u>	<u>22.80</u>	<u>8.00</u>	<u>7.00</u>
Purchase of mechanical equipment	-	-	5.70	10.00@	10.00@
Maintenance of roads, Mechanical equipment and buildings	55.00	8.00	19.00	11.00	8.00
Direction & Executive Staff	-	-	19.60	-	-
<u>Total</u>	<u>691.00</u>	<u>147.50</u>	<u>138.00*</u>	<u>134.00</u>	<u>110.00</u>

@ To be distributed over other works.

* According to the Planning Deptt., the likely expenditure has been reported at Rs 190.56 lakhs which includes Rs 58 lakhs paid to the Border Roads Organisation for Tshalemphe-Wangdip Road.

** The proposals contained in 1972-73 Budget Estimates amounted to Rs 146 lakhs.

(Rs. lakhs)

Third Five Year Plan and Annual Plan 1972-73 -
Bhutan - Post & Telegraph.

S.No.	Name of Scheme	Third Plan 1971-76 Recommen- ded	1971-72		1972-73	
			Recom- ended outlay	Ant. Exp.	Pro- posed out- lay	Recc- men- ded out- lay
1.	Direction	10.14			1.60	1.50
2.	Executive staff	4.39			1.04	1.00
3.	Existing Post Offices	13.29			2.63	2.40
4.	Departmental Post Offices	2.20			0.43	0.40
5.	Extra Departmental Post Offices	1.37			0.29	0.26
6.	New Services	1.69			0.33	0.30
7.	Philatelic Services	6.07			1.20	1.15
8.	Carriage of mails by vehicles	14.57			2.90	2.51
9.	Runner Services	7.75			1.53	1.43
10.	Training	0.81			0.19	0.14
11.	Telephone Services	20.00			4.00	3.45
12.	Telephone & Telegram Trainees	1.27				
13.	Telegraph Services	5.54			1.11	1.06
14.	Buildings	37.30			10.10	8.00
15.	Expansion of postal & telegraph facilities	3.61			1.00	0.90
	<u>Total</u>	<u>130.00</u>	<u>22.00</u>	<u>20.12</u>	<u>28.35</u>	<u>24.51</u>

CHAPTER IX - SOCIAL SERVICES

General Education

Against the budget provision of Rs 140.24 lakhs for 1972-73, the actual expenditure amounted to Rs 87.93 lakhs only. The large shortfall in expenditure was mainly on the slow progress on construction of buildings for Central Schools and other educational institutions. The proposals for 1972-73 for individual schemes were discussed with Director, Education in the light of the progress recorded in 1971-72 and the targets to be achieved over the five year period. An outlay of Rs 100 lakhs is recommended for various schemes in progress of which about Rs 42.25 lakhs would be on buildings against Rs 27 lakhs in 1971-72 and about Rs 60 lakhs on staff and contingencies. In the meeting of the Planning Committee, the suggestion of the Team to set up a Public Library in Thimpu and to organise extension lectures in the evening was accepted. A provision of Rs 5 lakhs is recommended in 1972-73 for this purpose. This will also cover the educational programme for family planning proposed to be introduced in the schools. This brings the recommended outlay under General Education for 1972-73 to Rs 105 lakhs. (Statement I enclosed).

Technical Education

9.2 The outlay of Rs 20 lakhs proposed by Education Department, Bhutan for two technical schools at Kharbad

and Deothan may be accepted. The suggestion to set up another technical school in the Central Budget mooted in the meeting of the Planning Department may be considered after details of the schemes have been worked out and scrutinised and approved by the Planning Department.

Health

9.3 Against the approved outlay of Rs 61.81 lakhs under Health for 1971-72, the actual expenditure according to Health Services was Rs 48.59 lakhs. This was higher (Rs 58.49 lakhs) according to the Planning Department. The figures of actual expenditure for 1971-72 would need reconciliation between the two Departments. For 1972-73, the proposals amount to Rs 59.17 lakhs. There was a detailed discussion with the Director, Health Services on individual schemes. It is suggested that a provision of Rs 57.50 lakhs may be made for the schemes included in the Third Five Year Plan of Bhutan for the year 1972-73. (Statement II enclosed).

Though full provision has been made for the Thimpu hospital on the basis of requirement as indicated at the time of the finalisation of the Third Five Year Plan, Director of Health Services mentioned that there was a scheme under contemplation to re-organise the Thimpu Hospital involving additional capital investment of

Rs 50 lakhs. On enquiry, it was found that the full details of the schemes are not yet available. Accordingly provision for 1972-73 has been made on the basis of the requirements assessed earlier. The question of providing additional funds for the reorganised hospital scheme could be considered after full details are available and the scheme has been accepted by the Planning Department.

In the discussion, the Team was informed that the Government of Bhutan desires to set up immediately a mental hospital near Thimpu. The concrete scheme has yet to be drawn up and financial implications had to be worked out. It is suggested that a Psychiatry Clinic may be opened to start with a cottage where serious mental cases could be kept. A provision of Rs 0.5 lakhs is recommended for inclusion in the Annual Plan. A similar amount has been suggested for Family Planning Programme which should be utilised in the light of the decision that is to be taken on the report of Dr. Banerjee who visited Bhutan in November last.

Water Supply

9.4 Against the five year outlay of Rs 59 lakhs for Water Supply schemes, the approved outlay for 1971-72 was Rs 11.7 lakhs. The expenditure was only of the

order of Rs 3.86 lakhs i.e. about 1/3rd of the approved outlay. Improvement for water supply at Bayliphong, Tashigong and Phunshiling were carried out. For 1972-73, an outlay of Rs 19 lakhs was proposed by the Government of Bhutan for these schemes. It is suggested that a provision of Rs 10 lakhs may be made for these schemes in 1972-73 which will be about 2½ times the last year's actual expenditure. This programme is being executed by the Chief Engineer, P.W.D. who is also incharge of Road works. While the expenditure on roads is satisfactory, the progress on water supply schemes has been disappointing. It is hoped that Chief Engineer, P.W.D. would give higher attention to this programme in 1972-73.

Urban Development

9.5 Against the five year provision of Rs 20 lakhs for urban development, no provision was proposed by the Government of Bhutan during 1972-73. After discussion, a provision of Rs 2 lakhs was agreed to prepare Master Plans for Phunshiling and other towns.

The need for preparation of the Master Plan for the development of Phuntsholing in coordination with the adjoining areas of West Bengal, namely, Jalpaiguri was stressed during the discussions. This factor may be kept in view while taking up development schemes in the Phuntsholing town, especially in view of its growing importance as the gateway to Bhutan. The growth potential of this town may also have to be carefully studied before the Master Plan is drawn up.

Third Five Year Plan and Annual Plans
1972-73 - Bhutan - Education

(Rs. lakhs)

	1971-76	1971-72		1972-73	
	Recomm- ended	Recomm- ended	Ant. Exp.	Proposed	Recommended outlay
<u>General Education</u>					
Direction	22.25	4.17		5.00	4.00
Primary Schools	82.00	14.00		16.00	12.00
Junior High Schools	66.00	11.00		12.72	10.00
Central Schools	180.00	30.75		42.85	35.00
Thimphu Degree College	73.00	7.00		8.28	7.00
Thimphu Public School	43.25	7.00		6.63	6.00
Kanglung Public School	33.00	5.83		5.85	5.00
Teachers' Training Institute, Sunchi	15.50	3.39		3.46	3.00
Rigney Monastery Schools	11.50	2.00		2.05	2.00
Translation and Printing of books in Bhutanese	3.00	0.74		0.53	0.50
Degree scholarships for students in India	16.60	1.84		1.84	1.80
Scholarships for studies in India	82.00	16.38		16.43	12.00
School for Buddhist Studies	4.90	2.65		2.42	1.70
Extension lectures (New Schemes)	-	-		-	5.00
	<u>632.00</u>	<u>106.75</u>		<u>124.06</u>	<u>105.00</u>
<u>Technical Education</u>					
Technical School, Kharbandi	49.00	10.00		10.00	10.00
Technical School, Deothang	38.00	15.00		10.00	10.00
Technical School, Gaylephug	-	-		-	-
	<u>87.00</u>	<u>25.00</u>		<u>20.00</u>	<u>20.00</u>
<u>Grand Total</u> <u>(General & Technical)</u>	<u>720.00</u>	<u>131.75</u>	<u>86.93</u>	<u>144.06</u>	<u>125.00</u>

Third Five Year Plan and Annual Plan 1972-73 - Health

(Rs. lakhs)

	1971-76	1971-72	1972-73	
	Recomm- ended outlay	Recomm- ended outlay	Ant. exp.	Propose d Bhutan Govt. Recommen- ed outlay
1. Direction	10.25	2.45		3.05
2. M.S.D. Phuntsholing	1.54	0.22		0.31
3. Thimphu Hospital	46.00	14.00		12.59
4. (a) Tashigang Hospital	33.34	5.00		4.67
(b) Sunchi Hospital	20.31	7.00		4.06
(c) Sarbhong Hospital	15.00	3.00		3.00
5. Phuntsholing Hospital	12.62	2.00		2.52
6. Civil annexe to B.R.Hosp.	0.75	0.08		0.15
7. Improvement of existing Disp.	50.83	9.00		9.16
8. Est. of new dispensaries	14.78	3.00		2.65
9. (a) Leprosy Colony, Gidakon	4.55	1.75		0.91
(b) Leprosy Colony, Kurteo	2.60	0.88		0.62
(c) Leprosy Colony, Parkijuli	1.25	0.25		0.25
(d) Leprosy Colony, Mongar	5.95	1.00		-
10. (a) Malaria Eradication Programme	53.04	9.50		10.61
(b) B.C.G.	2.27	0.30		0.45
(c) Goitre Control	3.12	0.50		-
(d) Trachoma Control	Nil	-		-
11. Training Programmes	2.80	0.25		0.56
12. Est. of Indigenous Disp.	3.00	1.02		0.82
13. Treatment of Bhutanese nationals outside the country	2.00	0.60		0.40
14. Mental Hospital	-	-		2.39
15. Family Planning	-	-		0.50
<u>Total</u>	<u>286.00</u>	<u>61.80</u>	<u>58.49</u>	<u>59.17</u>
				<u>57.50</u>

CHAPTER X - MISCELLANEOUS

Capital Project

Against the Five Year outlay of Rs 2 crores, an outlay of Rs 27.5 lakhs was approved for 1971-72 against which expenditure as reported by the Ministry of Finance and the Chief Engineer, P.W.D. for works in their administrative control amounted to Rs 42.48 lakhs. The progress of various works in 1971-72 and the proposal for 1972-73 was discussed with the implementing authorities - Ministry of Finance and Chief Engineer, P.W.D. An outlay of Rs 35 lakhs is recommended for 1972-73 as per details given in the table below:

	1971-76	(Rs. lakhs)				
		1971-72		72-73		
		Approved	Anticipated	Proposed	Recommended	
<u>Works executed by Ministry of Finance</u>						
National Assembly Building	16.0	-	-	-	-	
High Court Building	8.5	3.0	7.04	1.00	1.00	
National Archives	10.0	2.0	10.0	-	-	
Library-cum-Town Hall	5.0	3.0	-	5.00	4.00	
Stadium	2.0	0.5	2.0	-	-	
Flood Protection Works	23.5	2.0	3.18	5.00	5.00	
Housing Programme	25.0	6.0	3.00	5.00	5.00	
<u>Works executed by P.W.D.</u>						
Water Supply	11.0	3.0	17.26	2.00	2.00	
Sewerage	20.0	5.0		10.00	7.00	10.00
Drainage	11.0					
Internal Roads	50.0	3.0		13.3	3.00	
Approach Roads	18.0					
	<u>200</u>	<u>27.50</u>	<u>42.48</u>	<u>48.76</u>	<u>35.00</u>	

10.2 It is not proposed to take up the National Assembly building for the time being. The High Court building has been nearly completed and only the balance provision of Rs 1 lakh has been made in 1972-73 Plan. National Stadium has already been completed much ahead of schedule. The Library and town hall will be taken up this year, and will be completed at the end of the year.

10.3 The progress on flood protection works is quite satisfactory. The Team would like to reiterate its earlier recommendations that the entire programme should be technically vetted by competent engineer before substantial expenditure is incurred in the Plan period.

The Water Supply scheme in Thimphu is proposed to be completed in the current year. The sewerage and drainage scheme will be in progress.

Publicity, Statistics and Ministry of Development (Headquarters and protection and preservation of ancient monuments).

10.4 The outlay proposed by the Government of Bhutan for these three miscellaneous items is supported. While statistical officer has been appointed, the services of two Economic Investigators have yet to be procured. It is suggested that these two posts should be filled urgently so that the work could

be started in right earnestness. Although Statistical Officer joined 10 months ago, no substantial progress has been done so far. It is suggested that the programme of work should be chalked out as soon as possible and work on collection of statistical data particularly relating to the Plan should be collected. This should be followed by collection of basic data relating to the economy of Bhutan which will be required for the formulation of the next five year Plan of the country.

