

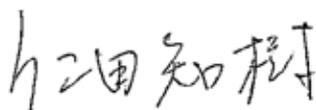
**MINUTES OF DISCUSSION  
ON THE PREPARATORY SURVEY  
ON THE PROJECT FOR IMPROVEMENT  
OF MACHINERY AND EQUIPMENT  
FOR CONSTRUCTION OF RURAL AGRICULTURAL ROAD (PHASE 2)  
IN THE KINGDOM OF BHUTAN  
(EXPLANATION ON DRAFT REPORT)**

Japan International Cooperation Agency (hereinafter referred to as "JICA") in May 2009 dispatched a Preparatory Survey Team on the Project for Improvement of Machinery and Equipment for Construction of Rural Agricultural Road (Phase 2) (hereafter referred to as "the Project") to the Kingdom of Bhutan (hereafter referred to as "Bhutan"), and through discussion, field survey, and technical examination in Japan, JICA prepared a draft report of the study.

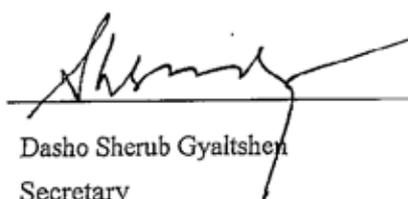
In order to explain and to discuss with officials of the Royal Government of Bhutan on the components of the draft report, JICA fielded to Bhutan the Preparatory Survey Team (hereinafter referred to as "the Team"), from 12<sup>th</sup> to 16<sup>th</sup> October, 2009 headed by Mr. Tomoki Nitta, Representative of JICA Bhutan Office.

As the result of discussion, both parties confirmed the items described on the attachment.

Thimphu, 16<sup>th</sup> October 2009



Mr. Tomoki Nitta  
Leader  
Preparatory Survey Team  
Japan International Cooperation Agency



Dasho Sherub Gyaltshen  
Secretary  
Ministry of Agriculture  
The Royal Government of Bhutan

## ATTACHMENT

### 1. Components of the Draft Report

The Bhutan side agreed and accepted in principle the components of the draft report explained by the Team.

### 2. Japan's Grant Aid scheme

The Bhutan side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the Bhutan as explained by the Team on the Project.

### 3. Schedule of the study

JICA will complete the final report in accordance with the confirmed items and send it to Bhutan by January 2010.

### 4. Confidentiality of the Project Cost Estimation

The Team explained the cost estimation of the Project as described in Annex-1. Both sides agreed that the Project Cost Estimation should never be duplicated or released to any outside parties before signing of all the contract(s) for the Project. The Bhutan side understood that the Project Cost Estimation described in Annex-1 is a provisional one as a result of the study and could be subject to change according to further examination by the Government of Japan.

### 5. Other Relevant Issues

#### 5-1. Cost for Construction Operation (Fuel and Oil for construction)

The Bhutan side confirms to allocate by the set time necessary budget for fuel and oil according to the Annex-2 in order to construct farm roads which would be constructed by machinery and equipment procured by the Project as long as the machinery works.

#### 5-2. Cost of Maintenance and Repair

The Ministry of Agriculture confirms to allocate necessary budget to the Central Machinery Unit (CMU) according to the Annex-3 in order to maintain and operate the existing and the requested machinery as long as the machinery works.

#### 5-3. Arrangement of Personnel

Both sides reconfirmed that the Project will be implemented by CMU and CMU would be staffed with necessary number of operators, mechanics, technicians and drivers by the set time by the arrival of the machinery according to Annex-4.

*Tom*

*AG*

#### 5-4. Environmental Impact Assessment (EIA)

The Bhutan side reconfirms to take EIA procedures for constructing farm roads as prescribed by Environment Act enacted in 2002.

#### 5-5. Reporting on Operational Plan

The Ministry of Agriculture shall submit an operational plan and the actual performance of CMU machinery, using the Annex-5, to JICA Bhutan office twice a year for at least 3 years after procuring the machinery in the Project or by the time total extension length reach to 1,500 km, whichever comes later. The plan would include not only for machinery procured by the Project but also the existing ones managed by CMU.

#### ANNEXES:

- Annex-1 Project Cost Estimation
- Annex-2 Construction cost for farm roads approved by the Ministry of Agriculture
- Annex-3 Operation and maintenance cost for the machinery approved by the Ministry of Agriculture
- Annex-4 Staffing plan and associated budget approved by the Royal Civil Service Commission
- Annex-5 Format of Road Construction Inventory and Machinery Inventory

*Tan*

*AG*

**Project Cost Estimation**

The total Project cost will be approximately 597 million Japanese Yen to be covered by the Japanese Grant Aid and Bhutan Contribution. This cost is provisional and will be further examined by the Government of Japan for approval of the Grant. The cost provided by the Government of Japan is shown below.

**(1) Project Cost provided by the Japanese side**

Project cost borne by the Japanese side is estimated to be 597 million Japanese Yen. Table below shows the contents of the Project cost.

| Project Cost by Category   | Amount (JY million) |
|----------------------------|---------------------|
| Equipment procurement cost | 578                 |
| Design supervision cost    | 19                  |
| <b>Total</b>               | <b>597</b>          |

**(2) Condition of Estimation**

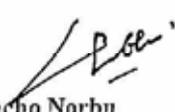
- ① Date of estimation ; June 2009
- ② Exchange rate ; 1 USD = 95.69 Japanese Yen

*Tan**Ng*

**Overview of Dzongkhag Agriculture Sector  
Budget Proposal in 10th. Five Year Plan  
2009-2013**

| Sl.No.             | Dzongkhags      | Budget proposal (Ngultrums in million) |
|--------------------|-----------------|--|
| 1                  | Bumtham         | 54.520                                 |
| 2                  | Chukha          | 228.088                                |
| 3                  | Dagana          | 130.597                                |
| 4                  | Gasa            | 5.343                                  |
| 5                  | Ilaa            | 44.145                                 |
| 6                  | Lhuntse         | 128.014                                |
| 7                  | Mongar          | 248.689                                |
| 8                  | Paro            | 170.084                                |
| 9                  | Pemagatshel     | 84.680                                 |
| 10                 | Punakha         | 73.535                                 |
| 11                 | Samdrupjongkhar | 132.940                                |
| 12                 | Samtse          | 171.930                                |
| 13                 | Sarpang         | 129.895                                |
| 14                 | Thimphu         | 40.550                                 |
| 15                 | Tashigang       | 249.822                                |
| 16                 | Tashiyangtse    | 92.489                                 |
| 17                 | Trongsa         | 120.363                                |
| 18                 | Tsirang         | 88.832                                 |
| 19                 | Wangduephodrang | 122.140                                |
| 20                 | Zhemgang        | 112.880                                |
| <b>Grand Total</b> |                 | <b>2429.536</b>                        |

Signed by:-

  
**Chenchu Norbu**  
 Director  
 Department of Agriculture  
 Ministry of Agriculture  
 Thimphu Bhutan

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དཔལ་ལྷན་འབྲུག་གཞུང་  
སོ་ལོ་ལྷན་ཁག  
བཀའ་སྲོལ་ཆེན་མོ་  
ཐིམ་ཕུ



"Walking the Extra Mile"

Annex-3 (1)  
DEPARTMENT OF  
AGRICULTURE  
Royal Government of Bhutan  
Ministry of Agriculture  
Tashichhodzong:  
Thimphu

DoA/Engg-24/ 29/

4th June 09

Mr. Taiji Usui,  
Project Formulation Advisor,  
JICA Bhutan Office.

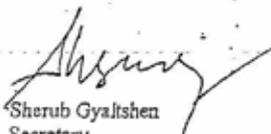
Sub: Manpower and Budget.

Sir,

As discussed and agreed during recent JICA mission for the project "Improvement and Equipment for Construction of Rural Agricultural Road (Phase2)", we are pleased to submit herewith the tentative list of manpower and anticipated budget that will be mobilized to handle and maintain second phase machinaries at CMU.

Regards,

Yours sincerely,

  
Sherub Gyaltshen  
Secretary

Copy to:

The Secretary, GNHC, Thimphu  
The Director, DoA, Thimphu  
✓ The Sr. Program Officer, CMU, Bumthang  
CPD, PPD, MOA, T/Phu  
CHRO, HRMD, MOA, T/Phu

PABX 322228, Fax: 323562; Director: 322805, Agriculture Division: 321291, Eng. Division: 329122,  
Horticulture Division: 323184, 323183

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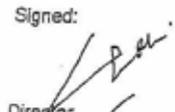
## Anticipated first year expenditure for Phase 2 machinery

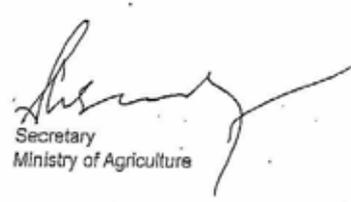
| Sl.No | Expenditure heads         | Position         | No | Annual Expenditure (Nu) | Total (Nu)       |
|-------|---------------------------|------------------|----|-------------------------|------------------|
| 1     | Pay and allowances        |                  |    |                         |                  |
|       |                           | Degree Engineer  | 2  | 224976.00               | 449,952.00       |
|       |                           | Diploma Engineer | 3  | 153802.00               | 460,805.00       |
|       |                           | Mechanic         | 7  | 124528.00               | 871,696.00       |
|       |                           | Operator         | 30 | 86688.00                | 2,600,640.00     |
|       |                           | Driver           | 8  | 86688.00                | 693,504.00       |
|       |                           | Helpers          | 20 | 65000.00                | 1,300,000.00     |
|       | Sub total--1              |                  |    |                         | 6,376,598.00     |
| 2     | Travel                    |                  |    |                         |                  |
|       |                           | Daily allowance  |    |                         | 1,974,000.00     |
|       |                           | Mileage          |    |                         | 301,450.00       |
|       | Sub total--2              |                  |    |                         | 2,275,450.00     |
| 3     | Maintenance of equipments |                  |    |                         |                  |
|       |                           | Excavator        | 20 | 389605.00               | 7,792,100.00     |
|       |                           | Roller           | 5  | 69220.00                | 346,100.00       |
|       |                           | Air compressor   | 5  | 155320.00               | 776,600.00       |
|       |                           | Hilux            | 3  | 110000.00               | 330,000.00       |
|       |                           | Self loader      | 1  | 300000.00               | 300,000.00       |
|       |                           | Fuel Tanker      | 1  | 150000.00               | 150,000.00       |
|       |                           | Workshop Van     | 3  | 355320.00               | 1,065,960.00     |
|       | Sub total--3              |                  |    |                         | 10,760,760.00    |
|       | Total (1+2+3)             |                  |    |                         | 19,412,808.00    |
|       |                           |                  |    | US\$ 413,038.47         | (1US\$=Nu 47.00) |

## Note:

Total budget for the following years will increase depending on the country's fiscal policy and market dynamics

Signed:

  
Director  
Department of Agriculture

  
Secretary  
Ministry of Agriculture

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འབྲུག་རྒྱལ་ཁབ་རྒྱུ་རྒྱུ་བཟུང་བའི་  
རྒྱལ་ཁབ་རྒྱུ་རྒྱུ་བཟུང་བའི་ཁྲིམས་ལུགས་  
ROYAL GOVERNMENT OF BHUTAN  
ROYAL CIVIL SERVICE COMMISSION



RCSC/HRMD/13/2009/ 1236

October 16, 2009

The Secretary  
Ministry of Agriculture  
Thimphu

Dear Sir,

Kindly refer to letter No. HRD/MoA/DoA/2/2271 dated October 14, 2009 re-submitting additional staff requisition for the Project for Improvement of Machinery and Equipment for Construction of Rural Agriculture Roads.

In this regard, the Royal Civil Service Commission during its 33<sup>rd</sup> Commission meeting held on October 15, 2009 reviewed the proposal and was pleased to approve in principle for recruitment of additional staff for the Project at the Central Machinery Unit, Bumthang as proposed on the following conditions:

1. Recruitment in phases to be decided later in consultation with the RCSC;
2. Staff to be recruited shall be on contract service; and
3. Eventually, the Ministry shall ensure sustainability of the Programme

With best wishes,

Yours sincerely,

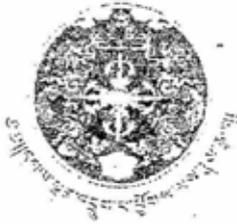
  
(Kinley Yangzom)  
for Royal Civil Service Commission

Copy to:

1. Chief HRO, HR Division, Ministry of Agriculture for necessary action.

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ROYAL GOVERNMENT OF BHUTAN  
Ministry of Agriculture  
Tshimphu Dzong  
Thimphu, Bhutan

HRD/MoA/DoA/2/ 2271

October 14, 2009

The Chief HR Officer,  
Human Resource Management Division,  
Royal Civil Service Commission,  
Thimphu

Sub: Request for additional staff for the Phase- 2 project at CMU

Madam,

As appraised earlier through our letter no. HRD/MoA/DoA/2/6209 dated June 4, 2009 the Ministry of Agriculture and the Government of Japan signed the Minutes of Discussion for Project for Improvement of Machinery and Equipment for Construction of Rural Agriculture Road (Phase 2). The project which is a grant of USD 6.42 million from the Government of Japan is to be based in the Central Machinery Unit (CMU), Bumthang under Department of Agriculture.

As a part of the agreement, the Ministry of Agriculture shall allocate to CMU necessary budget and equip the Unit with the required number of operators, mechanics and other officers. As indicated in the list attached, the Ministry will be receiving about 34 machineries by March 2011 and as such, it is important that the Ministry recruits about 42 staffs (26 operators, 8 drivers, 5 technicians, 2 welders, 2 B.E. Mech. Engineer and 3 Diploma Mech. Engineer) by 2010 in order to successfully implement the Project. We have also been informed informally by the funding agency that if the Ministry fails to meet the necessary resources as agreed, the project may not materialize.

In view of the above, we would like to request RCSC to kindly grant approval for the recruitment of the proposed staff to take up the project. We would also like to inform that the proposed staffs, if approved, will be recruited only in 2010 so as to keep it ready before the machineries arrive in 2011.

Thanking you.

Yours Sincerely,

Kinga Wangdi

(Chief HR Officer)

Copy to:

1. Hon'ble Secretary, MoA, Thimphu for your kind information
2. Director, DoA, MoA, Thimphu.
3. Chief Engineer, Engineering Division, DoA, MoA, Thimphu





## 資料 5 事業事前計画表（概略設計時考資料）

## 5 . 事業事前計画表 ( 概略設計時 )

### 事業事前計画表

|   |
|---|
| 1 案件名   |
| ブータン国第二次農村道路建設機材整備計画  |
| 2 案件の背景 ( 協力の必要性・位置づけ )   |
| <p>急峻な山岳地帯に孤立した農村が散在する「ブ」国では、外部と農村また農村同士を繋ぐ農村道路は必須の基盤インフラであり、地方分権化が進展した第9次5カ年計画 ( FYP ) 期間中 ( 2002-2008 ) には 1,754km の農村道路が建設された。農業省は現行の 10 次 FYP 策定に際して、国民総幸福委員会 ( GNHC ) との協議を経て、9 次 FYP の実績に基づき当初は 750km の農村道路建設を目標とした。</p> <p>しかしながら、2007 年 12 月 ( 上院、25 人 ) 及び 2008 年 3 月 ( 下院、47 人 ) に国政選挙が実施され、選挙においては、ほとんどの議員が農村道路の開発を公約とした。このように民主化を推進した結果、地域開発の基盤インフラとして、地域住民のニーズが高い農村道路の開発促進は、ブータンにおいて最も優先度の高いプロジェクトのひとつとなった。このため GNHC が全国の要望を取りまとめた農村道路計画延長は当初目標 ( 750km ) の 5 倍近い 3,264km となった ( 3,264km のうち CMU 機材により 1,500km の建設を計画し、残り 1,764km は民間委託により達成する計画 )。この結果を受けて「ブ」国政府は、農業省が提出した当初目標との大きな差異を埋めるべく政府を挙げて取り組んでいる。</p> <p>かかる状況の下、ブータン政府は国民の農村道路建設の要請に応えるべく、追加機材を調達することで第 10 次 5 カ年計画の達成に必要な体制強化を図るために「第二次農村道路建設機材整備計画」を新たに要請した。</p> |
| 3 プロジェクト全体計画概要  |
| <p>(1) プロジェクト全体計画の目標 ( 裨益対象の範囲及び規模 )</p> <p>本プロジェクトによって CMU の保有機材が増えることで、CMU が第 10 次 5 カ年計画中に建設できる農村道路が 675km 増え、既存機材と合わせて CMU 保有機材にて 1,500km の農村道路が建設される。これにより対象地域での、農産物の流通を含む経済活動が活性化し、僻地農村での教育や医療等の社会サービスへのアクセスが向上する。</p> <p>裨益対象：対象農村道路の沿線住民 / 裨益人口：約 83,000 人</p> <p>(2) プロジェクト全体計画の成果</p> <p>ア．農村道路建設機材が調達される。<br/>イ．対象農村道路が整備される。</p> <p>(3) プロジェクト全体計画の主要活動</p> <p>農村道路建設機材を調達する。</p> <p>第 10 次 5 カ年計画 ( 2008 ~ 2013 年度 ) において、「ブ」国全土で、CMU が既存機材と合わせて 1,500km の農村道路を建設する ( 本案件の調達機材による建設分は 675km )。</p>   |

(4) 投入

ア．日本側 (= 本案件): 無償資金協力 5.97 億円

イ．相手国側

(ア) 必要な人員の確保 46 名

(イ) 農村道路建設予算の確保

(ウ) CMU の運営・維持管理に係る経費の確保

(5) 実施体制

主管官庁: 「ブ」国農業省

実施機関: 「ブ」国農業省農業局 (中央機械センター、Central Machinery Center: CMU)

4 無償資金協力案件の内容

(1) サイト

建設する農村道路の対象 「ブ」国全域 20 県

主要機材を配置する CMU 本部 ブムタン県ジャカール

一部修理機材を配置する CMU 支所 サルパン県ゲレフ、タシガン県カンマ

(2) 概要

1) 土木工事、調達機器等の内容

農村道路建設機材一式の調達

(内訳) 油圧ショベル (20t) 及び油圧ブレーカ: 15 式、油圧ショベル (12t) 及び油圧ブレーカ: 5 式、ジャックハンマー 10 式、エアコンプレッサー 5 台、振動ローラ (10-11t) 5 台、トラックトレーラ (25t) 1 台、移動修理車 3 台、小型トラック 3 台、フォークリフト (3t) 1 台、燃料タンク車及び燃料タンク 1 式、修理工具・器具/スペアパーツ他 1 式

(3) 相手国側負担事項

銀行手数料 約 60 万円

(4) 概算事業費

概算事業費 5.97 億円 (無償資金協力 5.97 億円、「ブ」国側負担 60 万円)

(5) 工期

詳細設計・入札を含めて 13.5 ヶ月 (予定)

(6) 貧困、ジェンダー、環境及び社会面の配慮

「なし」

5 外部要因リスク

「ブ」国内で想定以上の自然災害 (サイクロン、地震等) が発生しない。

| 6 過去の類似案件からの教訓の活用   |                  |                |      |                  |                |                             |     |       |
|---|------------------|----------------|------|------------------|----------------|-----------------------------|-----|-------|
| 「なし」  |                  |                |      |                  |                |                             |     |       |
| 7 プロジェクト全体計画事後評価にかかる提案  |                  |                |      |                  |                |                             |     |       |
| (1) プロジェクト全体計画の目標達成を示す成果指標  |                  |                |      |                  |                |                             |     |       |
| <table border="1"> <thead> <tr> <th>成果指標</th> <th>現状の数値<br/>(2008年)</th> <th>計画値<br/>(2013年)</th> </tr> </thead> <tbody> <tr> <td>本プロジェクトで調達した機材<br/>による農村道路延長</td> <td>0km</td> <td>675km</td> </tr> </tbody> </table> |                  |                | 成果指標 | 現状の数値<br>(2008年) | 計画値<br>(2013年) | 本プロジェクトで調達した機材<br>による農村道路延長 | 0km | 675km |
| 成果指標  | 現状の数値<br>(2008年) | 計画値<br>(2013年) |      |                  |                |                             |     |       |
| 本プロジェクトで調達した機材<br>による農村道路延長   | 0km              | 675km          |      |                  |                |                             |     |       |
| <p>注: 第10次5カ年計画では、農村道路 3,264km の延長が計画されているが、このうち CMU 機材による整備計画延長は 1,500km で残り 1,764km は民間委託する計画。1,500km のうち CMU の既存保有機材で 825km、本プロジェクトで調達予定の機材で 675km を建設予定。</p>  |                  |                |      |                  |                |                             |     |       |
| (2) その他の成果指標  |                  |                |      |                  |                |                             |     |       |
| 「なし」  |                  |                |      |                  |                |                             |     |       |
| (3) 評価のタイミング  |                  |                |      |                  |                |                             |     |       |
| 2013年度以降  |                  |                |      |                  |                |                             |     |       |
| (機材調達から2年後、「プ」国第10次5カ年計画終了後)  |                  |                |      |                  |                |                             |     |       |

## 資料6 参考資料 / 入手資料リスト

## 6. 参考資料 / 入手資料リスト

調査名：ブータン王国農村道路建設機材整備フェーズ2 協力準備調査

| 番号   | 名 称   | 形態<br>(図書・ビデオ<br>地図・写真等) | 机 <sup>レ</sup> 形 <sup>ル</sup><br>机 <sup>レ</sup> 形 <sup>ル</sup> | 発行機関                   | 発行年   |
|------|---|--------------------------|--|------------------------|-------|
| 1    | Bhutan At a Glance 2008   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 統計局             | 2008年 |
| 2    | Statistical Yearbook of Bhutan 2008   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 統計局             | 2007年 |
| 3-1  | The Tenth Five Year Plan 2008-2013 Volume 1   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府<br>国民総幸福委員会     | 2008年 |
| 3-2  | The Tenth Five Year Plan 2008-2013 Volume 2   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府<br>国民総幸福委員会     | 2008年 |
| 4    | GNHC 10 <sup>th</sup> Five Year Plan  | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府<br>国民総幸福委員会     | 2008年 |
| 5    | Poverty Reduction Strategy Paper (PRSP)   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府 財務省<br>計画局      | 2004年 |
| 6-1  | Renewable Natural Resources (RNR) Sector<br>Tenth Plan (2008-2013) Volume 1                                       | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府 農業省<br>RNS 調査局  | 2008年 |
| 6-2  | Renewable Natural Resources (RNR) Sector<br>Tenth Plan (2008-2013) Volume 2                                       | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府 農業省<br>RNS 調査局  | 2008年 |
| 7    | Dzongkhag Rural Access Planning Report<br>(Draft Final Report)  | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府 農業省<br>農業局      | 2005年 |
| 8    | Vulnerability Analysis and Mapping 2005   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>計画政策局    | 2005年 |
| 9-1  | Agriculture Statistics 2007   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2009年 |
| 9-2  | Agriculture Statistics 2006   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2008年 |
| 9-3  | Agriculture Statistics 2005   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2007年 |
| 9-4  | Agriculture Statistics 2004   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2006年 |
| 10-1 | Livestock Statistics 2007   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府 農業省<br>家畜局      | 2009年 |
| 10-2 | Livestock Statistics 2006   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup><br>(電子データ)                       | ブータン政府 農業省<br>家畜局      | 2008年 |
| 11   | Guidelines for Farm Road Development (Draft)  | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2009年 |
| 12   | Technical Guidelines for the Construction of<br>Farm Road(Draft)  | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2009年 |
| 13   | Maintenance Manual for Rural Access<br>Infrastructure (Draft)   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府 農業省<br>農業局      | 2009年 |
| 14   | Environmental Assessment Act, 2000  | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府<br>国家環境委員会      | 2000年 |
| 15   | Regulation for the Environmental Clearance of<br>Projects and Regulation on Strategic<br>Environmental Assessment | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府<br>国家環境委員会      | 2002年 |
| 16   | Road Sector Development and Environmental<br>Friendly Roads in Bhutan   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府<br>公共事業・定住省 道路局 | 2004年 |
| 17   | Bhutan Trade Classification Customs Tariff and<br>Sales Tax Schedule 2007   | 図書                       | 机 <sup>レ</sup> 形 <sup>ル</sup>                                  | ブータン政府財務省              | 2007年 |

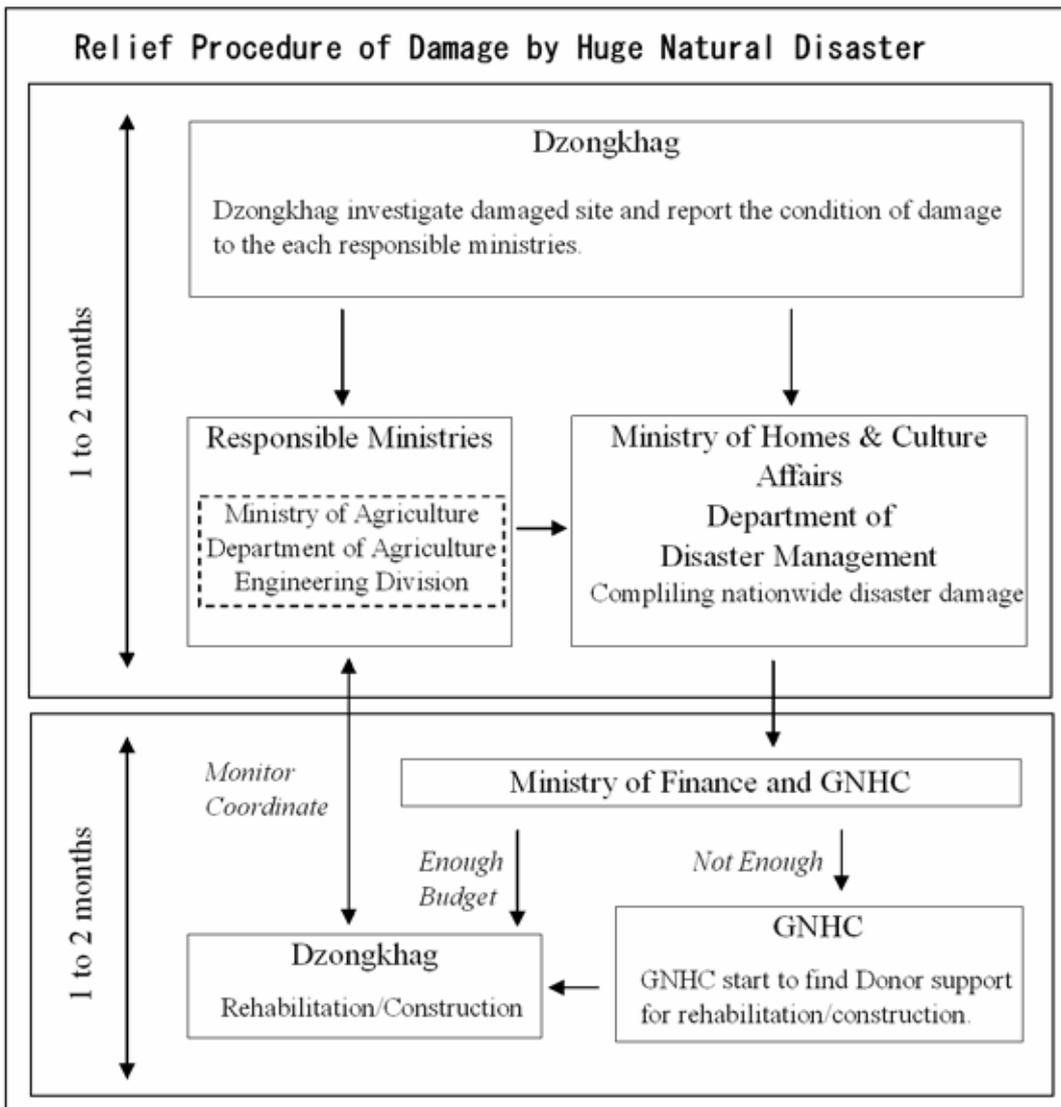
## 資料7 ソフトコンポーネント計画書

## 7. ソフトコンポーネント計画書

本プロジェクトでソフトコンポーネントはなし。

## 資料 8 その他の資料・情報

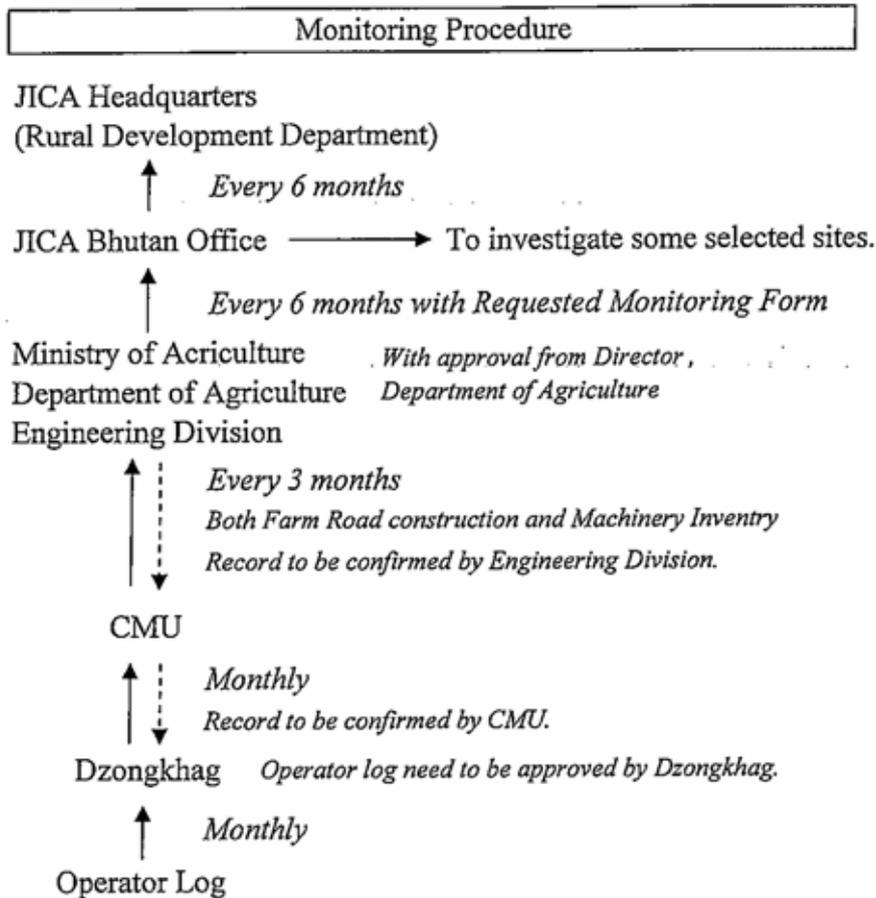
( 1 ) 大規模自然災害による災害復旧への対応



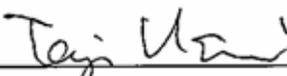
( 2 ) 農村道路災害復旧への対応

| Farm Road Condition                         | Damage Scale   |   |
|---|--|---|
|   | Large  | Small   |
| Existing Farm Road<br>(Constructed already) | <p>Cost for rehabilitation/construction of FR mainly covered by Donor Fund because of huge amount required.</p> <p>Rehabilitation/construction of FR will be carried out by contract base and using private machinery instead of CMU's.</p> <p><b>FR construction under 10th FYP is continuously and keeping planned progress.</b></p> | <p><i>In case of Farm Road having high priority (Much beneficiary, Strategic road, etc.)</i></p> <p>Available CMU machinery shift to the damaged FR site and rehabilitate them.</p> <p><b>Accordingly FR construction under 10th FYP is suspended.</b></p> <p><i>In case of normal Farm Road</i></p> <p>Instead of CMU machinery use, waiting for donor fund or Dzongkhag's budget to recover and using private machinery by contract base.</p> <p><b>Then FR construction under 10th FYP is continuously and keeping planned</b></p> |
| Ongoing Farm Road                           | <p>Same the above</p>  | <p>Damaged portion to be rehabilitated by CMU.</p> <p><b>Then progress of FR construction becomes slightly lower than the planned progress of 10th FYP.</b></p>   |

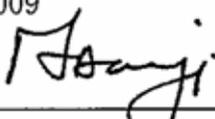
( 3 ) 報告手順



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JICA Bhutan Office

16/Oct. /2009

  
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