

# 7

## PERFORMANCE AND THEMATIC AUDITS

The Royal Audit Authority had prioritised performance audits as one of the core mandates of the Authority. Accordingly the Royal Audit Authority conducted 9 performance audit on topics of significance taking into account among others the estimated audit impacts, national importance, financial materiality, complexity and uncertainty of operating environments and public grievances on delivery of services.

Out of the 9 audits conducted, the Royal Audit Authority issued 8 reports during the year. The performance audit report on the mining operations, the report on the Department of Roads – 9<sup>th</sup> Plan Review and the report on the Audit of Information Security were submitted and deliberated extensively in the second session of the 1<sup>st</sup> Parliament due to the urgent nature of issues reflected in the reports. Therefore this chapter contains only the summary of the remaining 5 performance reports given below:

- ✦ Solid Waste Management;
- ✦ Medical Waste Management;
- ✦ National Park Management;
- ✦ IDRC Projects improving Rural Livelihoods in Bhutan through addressing identified information needs; and
- ✦ Dzongkhag Local Area Network & Internet Connection.

### 7.1 Solid Waste Management

Generation of waste is an inevitable aspect of modern development. With rapid urbanisation, change in consumption pattern and drifting rural-urban migration, the challenges in managing waste has far surpassed the municipal authority's capacity and competency to manage it. Generation and composition of waste has increased by manifolds over the last decades.

Therefore, the Royal Audit Authority embarked on auditing this critical issue hoping to add value by recommending measures for promoting best practices in waste management. The audit was focused on two growing municipalities of Thimphu and Phuentsholing. Nevertheless, RAA hopes that these recommendations, if practical can be replicated to other emerging municipalities and aid them in managing solid waste in a much systematic and scientific manner. The summary of significant findings and recommendations made in the report are presented below:

## Findings

### 7.1.1

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Both the municipalities have not maintained any records on solid waste. It has impeded proper monitoring, control and management of wastes.

### 7.1.2

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There were multiple agencies involved in framing policies, rules and regulations with no proper coordination among themselves. The rules and regulations at times were found to be inconsistent and vague.

### 7.1.3

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The existing Rules and Regulations on solid waste, despite being inadequate, were not enforced. They were also found to be more of punitive nature.

### 7.1.4

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Municipalities though independent administratively, did not have information sharing system which could otherwise be mutually beneficial.

### 7.1.5

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Generally, there is a lack of awareness amongst people on the collective responsibility in management of wastes.

### 7.1.6

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Landfill at Memelakha, Thimphu has crossed its estimated life by almost 7 years and currently operating more as an open dump site than a landfill with possible adverse implication on the environment.

### 7.1.7

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There are several areas within the Phuentsholing municipality where wastes are being dumped illegally. Some of the glaring examples are the areas near sewerage plant, below truck parking, storm water drain and the backyards.

### 7.1.8

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Phuentsholing City Corporation had not formed a Municipal Committee as of date. The requirement is stipulated in Bhutan Municipal Act of 1999.

### 7.1.9

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Of all wastes, construction waste is the most neglected one. Contractors dump the unwanted materials at the place of their convenience; often on road sides or drains or in the construction vicinities and river sides.

## Recommendations

- ↪ Proper records on management of solid wastes should be maintained. Appropriate formats could be worked out to facilitate easy and timely recording of data;
- ↪ There should be continuous and synchronised coordination amongst agencies framing environmental policies and emulate the policies through appropriate rules and regulations. These agencies also need to work very closely with implementing agencies. Municipalities in the country should have some form of information sharing platform on management of solid waste;
- ↪ Municipal authorities need to review and strictly enforce the rules;
- ↪ Coordinated campaigns on solid waste need to be initiated to educate people. As of now only ad-hoc campaigns were found initiated;
- ↪ The municipal authorities in collaboration with the related agencies should come out with appropriate policies or regulations to deal with the growing problems of disposing obsolete/out of date stocks and goods;
- ↪ Thimphu Municipal Corporation should identify a new site for landfill with utmost urgency;
- ↪ Breakdown of sewer lines across Dooti river should be repaired immediately;
- ↪ The Phuentsholing City Corporation should make concerted efforts to stop dumping of wastes at non approved sites;
- ↪ The Phuentsholing Municipal Corporation should also work with Jaigoan town authorities to avoid dumping of waste in unauthorised areas; and
- ↪ Construction and Demolition(C&D) wastes need better management strategies. Municipal Corporation or National Environment Commission could draft a guideline or rules on managing C&D waste.

## 7.2 Medical Waste Management

With the pace of development in the country, several new hospitals are being built while the existing ones are being upgraded. Therefore, the Royal Audit Authority (RAA) found it appropriate and timely to conduct a proper study of medical wastes generated by the hospitals. Accordingly, the RAA had conducted the audit of medical waste management in Phuntsholing and Thimphu. The recommendations from this study could also be replicated to many other hospitals and Basic Health Units which are located in other parts of the country.

The summary of significant findings and recommendations made in the report are presented below:

## Findings

### 7.2.1

The composition and the quantities of wastes generated by the hospitals have not been documented.

### 7.2.2

Although general guidelines on managing medical wastes exist, they were not transformed into rules and regulations. Therefore, the accountability in managing medical waste is generally lacking.

### 7.2.3

Management of waste was often thought to be a secondary assignment by the hospital staff. In a questionnaire response, many felt that a dedicated team should be appointed if medical waste has to be managed properly.

Since waste management is not their core function, it often did not get the budgetary support from the government.

### 7.2.4

There was lack of knowledge and awareness amongst the cleaners and ward persons on the management of medical waste. Many of them were found handling wastes without protective gears. Laboratories workers were provided with protective gears which could not fully protect them from work hazards.

### 7.2.5

Autoclaving of waste at Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) was found to be done in a normal waste containing polythene bag instead of specially designed autoclaving bags.

### 7.2.6

No procedures were in place to deal complaints and cases related to the Occupational Health and Safety (OHS) and Hospital Acquired Infections (HAI).

## Recommendations

- ↻ The compositions and quantities of waste generated from the individual hospitals should be properly documented for future studies related to medical wastes;
- ↻ The Ministry of Health needs to formulate rules and regulations in line with the policy document for Solid Waste Management 2006.

- ↗ The Ministry should also form a dedicated team to monitor the implementation of the rules and regulations. The present Committee has not been able to dedicate enough time for monitoring.
- ↗ More structured training and awareness programmes need to be organised for people handling medical waste, especially the ward persons and cleaners.
- ↗ Patients and their attendants need to be made aware of the concerns and problems associated with medical waste, through awareness sign boards and brochures.
- ↗ National Environment Commission (NEC), as a nodal agency for environment, need to backstop hospital management in technical aspects of waste management and monitor their effectiveness from time to time.

## 7.3 National Park Management

The Audit on the Management of National Parks was taken up with the objectives to assess the adequacy of planning, management and reporting systems in achieving the desired outputs and outcomes; to review and assess the management of risks to the conservation of the natural and cultural heritage; and to review the economy, efficiency and effectiveness in the use of various funds allocated to the park offices.

The audit covered three parks and a sanctuary namely; Jigme Dorji National Park (JDNP), Jigme Singye Wangchuck National Park (JSWNP), Thrumshingla National Park (TNP) and Bumdeling Wildlife Sanctuary (BWS).

The significant findings and recommendations are briefly highlighted below:

### Findings

#### 7.3.1

There was minimal integration of plans amongst the Parks, Geogs and the Dzongkhags, with the possibility of leading to duplication of works and loss of accountability.

#### 7.3.2

None of the park management offices had initiated impact assessment to assess the efficiency and effectiveness of the various activities carried out by them.

#### 7.3.3

Zonation, though mentioned as a significant activity in all management plans, had not been carried out by the park management offices with the exception of BWS.

#### 7.3.4

There are inconsistencies among the various Parks in demarcating the different zones such as core, buffer and multiple-use. The zones are being interpreted

differently by different Park Management Offices and also within the various levels of staff in each Park.

### 7.3.5

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There is no uniform and consistent approach in implementing environmental awareness programmes amongst parks.

### 7.3.6

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There is no consistency amongst the administrative organogram of the various parks, with each park having its own distinct set up.

### 7.3.7

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There is no proper documentation, especially in JDNP and JSWNP, on the various activities executed by them in the field.

### 7.3.8

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Although most parks officials have availed ex- country and in-country trainings, seminars and workshops, none of the parks had carried out training need analysis to ascertain the need, relevance and priority of the training.

### 7.3.9

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Considering the size of area under them and the need of sending the patrolling teams in groups, most of the parks are still facing the manpower constraint.

### 7.3.10

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The management plans of most of the parks, with the exception of TNP, had not come out on time. Besides, many of the activities included in the management plans were not achieved.

### 7.3.11

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There is often conflict in balancing the activities between conservation and development. The recent memory could be that of the development of the rich Takin habitat across the Tshachu area under JDNP. Most people in the park region often view the Park Management Offices as Donors.

## Recommendations

- ↻ The Park Management Offices should document all the activities carried out at field level, including the lists for all species.
- ↻ The Parks should integrate their ICDP activities with Dzongkhags and Geogs to avoid duplication and to obtain greater value for money.
- ↻ Periodically, the Park Management Offices should assess the impact of their activities in relation to their objectives and desired outcomes.

- ↪ A more uniform and consistent approach towards ICDP and conducting environmental awareness programmes could be worked out within and amongst the parks.
- ↪ The Department of Forest should develop a more consistent administrative organogram and the names and functions of the different units within the Park Management Offices should be standardised.
- ↪ A proper Need Analysis should be carried to determine the need and relevance and to identify the types of trainings required for the staff and other stakeholders. Placing the right people at the right job, especially after the training, should also be looked into by the Department and Park Managers themselves.
- ↪ Research works should be strengthened at a larger scale. Where appropriate works in conserving parks should be based on some kind of research works done.
- ↪ The Department and/or the park managers should initiate ways of sharing information amongst the park managers, conservationists and other environmental institutes through various forums.
- ↪ The Department may also look into the constraints faced by the various Park Management Offices in balancing their activities between the conservation and the development. Any developmental activities need to consider the implications for the biodiversity and integrate appropriate measures, if biodiversity is to be conserved.

## **7.4 International Development Research Centre (IDRC) Projects improving Rural Livelihoods in Bhutan through addressing identified information needs**

The rapid growth in the field of Information Technology has been one of the most far reaching and lasting phenomenon of recent times. Nowadays, government departments and agencies in a number of countries are increasingly and intensively using Information & Communication Technology (ICT) in their operations. The Royal Government has also taken enormous efforts and made huge investments to boost ICT industry in the country. As an initiative to make services and information accessible to the rural community, the Ministry of Information & Communication had taken up a trial ICT Project called '**Improving rural livelihoods in Bhutan through addressing identified information needs**' with the financial assistance from International Development Research Centre (IDRC). The project was mainly focussed on improving the rural livelihoods in the country by investigating and developing relevant content & applications, as well as investigating the viability of Wi-Fi technology as an alternative for telecommunication infrastructure.

The audit of rural access connectivity, in particular the IDRC project, was carried out to assess the economy, efficiency and effectiveness of the project with particular emphasis on the impact of the Information & Communication Technology on the livelihoods of rural communities.

The significant findings and recommendations are briefly highlighted below:

## Findings

### 7.4.1

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The apathy from the rural communities towards the project was quite evident which is indicative of their low level of e-readiness.

### 7.4.2

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None of the beneficiaries had made use of the Content & Application System (www.cas.bt) to address their identified information needs resulting in non-achievement of the desired objectives. The project thus failed to make any pertinent transition on the livelihoods of the rural communities as anticipated.

### 7.4.3

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A total sum of Nu. 688, 916.9 had been spent on non-project related activities such as ex-country training and equipment.

### 7.4.4

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Without adequate funds for the project continuity, the long term financial sustainability of the project remained as an issue to be addressed.

### 7.4.5

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The Department had failed to include a clause on the ownership of the Content & Application System in the agreement. The system still legally belong to the author (developer) under the copyright laws.

### 7.4.6

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The Content & Application system failed to address all identified information needs of the beneficiaries. It did not contain some of the services/functionalities specified by Department of Information Technology.

### 7.4.7

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Other than printing, photocopying, Internet for emails and fax services none of the rural citizens had sought any information from the content & application system.

## Recommendations

- ↗ Considering the poor receptivity of the trial Community Information Centres due to very low level of e-readiness among the rural communities, the government's plan to establish such centres in all the 205 gewogs during the 10<sup>th</sup> Five Year Plan may have to be re-looked into;
- ↗ There is a need to ensure that the Department holds the ownership of the source code (application system) with inclusion of ownership clause in the agreement.
- ↗ The DIT should develop a comprehensive IT plan with complete descriptions of the projects (system development, procurement, infrastructure etc.) along with activities to be carried out during the fiscal year. Existence of yearly IT plan ensures compliance to policies and strategies highlighted in BIPS;
- ↗ The DIT should frame clear exit and sustainability strategy to maintain the continuity of the project;
- ↗ The DIT should review and identify the causes of lapses related to IDRC project and accordingly outline remedial actions;
- ↗ The DIT should conduct proper project feasibility study to appraise the viability and worth of IT projects to be undertaken in order to achieve the intended purpose and to ensure optimal utilisation of resources;
- ↗ The DIT should strictly carry out User Acceptance Testing to check whether the system is meeting all the user requirements/specifications and is fully functional;
- ↗ The project management should obtain appraisals and feedbacks from the stakeholders and beneficiaries to keep track of the project life cycle development;
- ↗ The project management should provide proper physical and environmental controls such as fencing for the VSAT terminal dish and lightning arrester for the WiFi antennas; and
- ↗ The Project management should establish Information Technology Steering Committee (ITSC) with the responsibility of ensuring that IT priorities are properly made, essential IT management activities are undertaken and the IT projects progress in line with the plan and budget.

## 7.5 Dzongkhag Local Area Network & Internet Connection

The Department of Information Technology under the Ministry of Information and Communication initiated the project “*Dzongkhag Local Area Network & Internet Connection*” with financial support from the Government of India. The project aimed to provide infrastructure and implement LAN using client/server architecture and Internet facility to enhance efficiency, productivity and easy communication. The project was implemented in all the twenty Dzongkhags through installation of LAN and leased line Internet connections. Due to unavailability of telecom facilities, the project couldn’t provide lease line connections in Gasa and Dagana Dzongkhags. The project was targeted to be completed during the 9<sup>th</sup> Five Year Plan. The Royal Audit Authority carried out the audit of “Dzongkhag Local Area Network & Internet Connection” to ascertain the economy and efficiency of the project implementation and to determine whether the intended objectives were achieved.

The significant findings and recommendations are briefly highlighted below:

### Findings

#### 7.5.1

Such an important project implemented at a cost of more than Nu. 28.000 million was managed by a fairly new graduate with no prior experience in the project management and with very limited exposure to the procurement and financial rules of the government.

Besides, several important projects were being executed simultaneously by the DIT with its limited human resource. Lack of manpower and time were cited as the main reasons for the failure of the project.

#### 7.5.2

In spite of retendering the work, the tender failed to attract adequate participation from the prospective bidders due to flaws in the tender document.

There was no clearly specified output (nature and details of work to be carried out by contractors) against the BOQ item classified as ‘others’ thereby enabling the contractors to claim unjustified amounts for the work not rendered.

#### 7.5.3

With established and technically sound firms quoting as low as 60% of the DIT’s cost estimate, the accuracy of the DIT’s cost estimate remained questionable.

#### **7.5.4**

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LAN equipment and accessories were directly issued to the contractors without maintaining accounts and records to validate day to day receipt & consumption of materials.

Further, the DIT totally depended on the contractor's reports and did not have a system of independently assessing the status of the work.

#### **7.5.5**

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The Project had not maintained appropriate records against which the contractors' bills could be verified. Besides, the contractor's bills were sanctioned without conducting the requisite physical verification and without ascertaining the actual quantum of work done.

#### **7.5.6**

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There were inadequate controls to protect the equipments especially the switches and cables from physical damages and accidental disconnections.

#### **7.5.7**

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There were no established procedures to ensure user authentication. The security practice of assigning user names and passwords did not exist.

#### **7.5.8**

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There was no backup system or contingency plan to recover data in case of disasters like server breakdown or fire.

#### **7.5.9**

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Neither the network administrator training nor the user trainings provided by the DIT benefitted the Dzongkhags.

#### **7.5.10**

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None of the Dzongkhags that RAA visited had maintained inventory records of the LAN and WAN equipments.

#### **7.5.11**

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There was no optimal utilization of print, file, and centralized storage facilities except for Internet sharing facility. Besides, the properties were underutilised and not managed properly in all the six dzongkhags that RAA visited.

#### **7.5.12**

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There were cases of excess and wasteful payments such as payments for works not rendered (Nu. 135, 009.00), payment not made in conformity with the progress of work (Nu. 456,290.00), and payments for travels beyond rational routes (Nu. 23,904.00).

## Recommendations

- ↗ The DIT should appoint project managers having project management skills and exposure on the government procurement system and financial rules and regulations.
- ↗ The Tender Committee should exercise due care and diligence in examining whether the bids are complete and free of errors. Besides, all terms and conditions in the bidding document and the contract agreement should be strictly adhered to;
- ↗ The Tender Document should be clear and should not contain ambiguous items of work such as *'Others'* where content and the required outputs are not defined;
- ↗ The utilization and consumption of all government properties should be monitored and controlled to ensure judicious and prudent use;
- ↗ Every client and work station must be configured to the main domain and every Dzongkhag must make use of other resource sharing facilities like printer and storage sharing. To this effect, the DIT or the **Ministry of Finance** must encourage the purchase of network printers that can support number of users rather than purchasing and maintaining several individual printers.
- ↗ The Dzongkhags should maintain inventory of LAN equipments to safeguard the equipment against loss, theft and/or misuse.
- ↗ The Dzongkhags must maintain backup system and establish adequate physical, environmental and logical access controls. Anti virus software should also be installed in the servers as well as in the clients' computers.
- ↗ Every possible alternative must be explored to reduce the cost and other inputs, so as to achieve the objective at the lowest possible cost. There were cases of excess and illogical payments, which if avoided, could have reduced the cost of the project.
- ↗ The Administration and Finance Division should advise the project managers on any financial, procurement and other related matters.