



# SaZhi

“Securing the priceless land for prosperity and happiness”



National Land Commission's quarterly newsletter

April–June, 2016 Vol. III, Issue II

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His Majesty the King visited Dawathang village of Langchenphug gewog in Jomotshangkha Drungkhag, Samdrupjongkhar on 23rd June, 2016. Dawathang is a new village where 31 households from Langchenphu, Serthi and Lauri gewogs started a new life through National Rehabilitation Program. His Majesty granted land kidu to the beneficiaries.

Picture courtesy: Kuensel

## Phuntsholing Thromde receives new Lagthrams



Dy. Chief Urban Land Registrar handing over Lagthrams of Phuntsholing Thromde

On 6<sup>th</sup> June 2016, the Officiating Chief Urban Land Registrar handed over 196 Thrams of Core area and 58 Thrams of Amochu area under Phuntsholing Thromde to the Thromde Surveyor Pema Namgyel. The Lagthrams were issued only for the fine plots (without excess or deficit issues).

Lagthrams of extended areas and Local Area Plans of Damdara, Rinchending and Pekarshing were handed over in 2015.

There are 261 and 38 Thrams in Core area and Amochu LAP respectively which are pending due to structure overlap and some due to absentee cases.

## The 2<sup>nd</sup> Guest Speaker for the Friday Forum

The Chief Executive Officer of the Druk Holding & Investments, Dasho Karma Yezer Raydi was the 2nd Guest Speaker invited by NLCS for the Friday Forum held on 20<sup>th</sup> May, 2016.

Having served the tsa-wa-sum for 27 years in various capacities, Dasho has a vast experience. He talked on "Institution of DHI".

Dasho said that DHI has been instituted for the welfare of the State and it is the commercial arm of the Royal Government of Bhutan established in 2007 upon issuance of the Royal Charter in November 2007 "to hold and manage the existing and future investments of the Royal Government for the long term benefit of the people of Bhutan".



*Dasho Karma Yezer Raydi,  
the CEO of the DHI*

As per the Charter, DHI requires to safeguard and enhance national wealth for all generations of Bhutanese through prudent investments. He also stated that DHI aims to improve corporate governance by way of doing away with bureaucratic procedures and depoliticizing the corporate set up. It was also mentioned that it endeavors to promote meritoc-

racy -right person for the right job on recognizing his/her capabilities.

DHI is the largest and only government-owned holding company in Bhutan. It has shares in 20 different companies, operating in the manufacturing, energy, natural resources, financial, communication, aviation, trading and real estate sectors. Out of the total companies 11 are fully owned by the DHI while 3 are DHI controlled Companies and 6 are DHI linked Companies. The Controlled Companies are the ones where DHI has more than 51% of shares and the Linked Companies are the ones where DHI owns less than 51% of shares.

## The Champion shares his memory secret

The Secretariat invited the memory Champion Mr. Jayasimha on 1st and 2nd June 2016 to share his memory secret with the NLCS officials.

The Squadron Leader Mr. Jayasimha is India's leading soft skills trainer. He holds maximum Guinness World Records of 14 times. He has 21 years of rich experience in the field of Education, Training and Development in Air Force.

The session was attended by more than 50 staff including



*NLCS staff with Mr. Jayasimha*



Land Registrars, Survey Engineers, Surveyors, Record Assistants and Administrators who deal with numbers on daily basis. The NLCS Officials have to deal with lots of numbers such as from Thram numbers, plot numbers, coordinates, areas and so on.

Therefore, it was felt necessary that NLCS staff know basic techniques of memorizing figures relevant to daily work. Mr. Jayasimha revealed the creative visualization method for

memorizing any digit of numbers using the following phonetic method/symbols.

- |         |              |
|---------|--------------|
| 1= t, d | 6= J, ch, sh |
| 2= n    | 7= k, c, g   |
| 3= m    | 8= f, v      |
| 4= r    | 9= p, b      |
| 5= L    | 0= z, s      |

Assigning these phonetic signs to the number given to memorize, he taught how to create word out of the phonetic sign which are easy to remember

and make story. Story helps any person to create pictures in mind respective to each word and thus making easy to remember the corresponding number.

It is believed that humans "only" make use 10 percent of their brain. The potential of our brain is not known until one makes full use of it. As saying goes "Practice makes a man perfect" Mr. Jayasimha advised everyone to practice the memory techniques he had shared.

## New LAPs of Phuntsholing and Thimphu demarcated

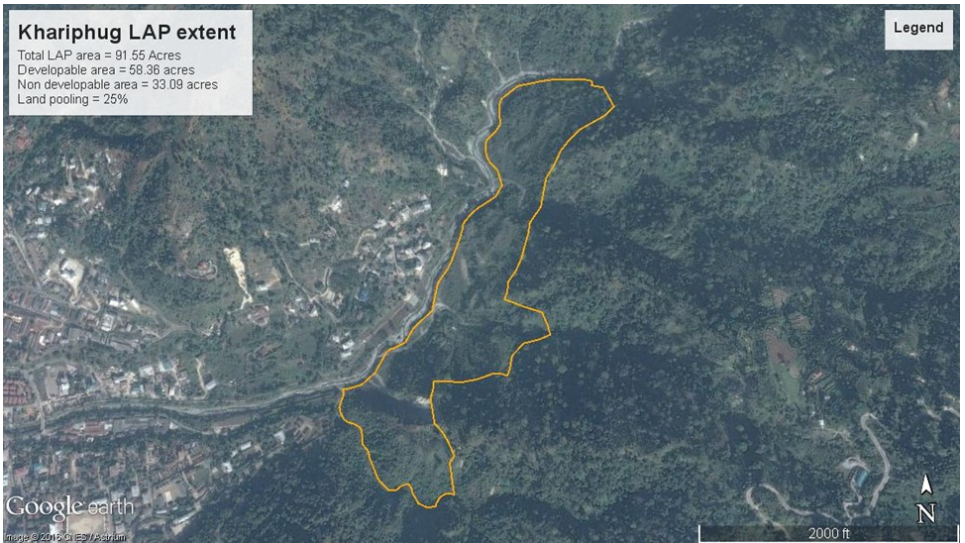
**Kharephug and Damdara (backside):** Demarcation of plot boundary in Kharephug and back side of Damdara, under Phuntsholing Thromde were completed by end of May, 2 016.

Kharephug LAP covers an area of 91.55 acres with total of 80 plots. There are 23 Thramholders for 27 plots which accounts for 52.1 acres. Out of the total area only 41.16 acres is developable area. Rest are steep lobe with gradient more than 50°.

LAP backside of Damdara covers an area of 67.87 acres with total of 69 thramholders accounting to 43.82 acres. There are 87 plots of which, 18 plots were not able to finalize demarcation. Only 69 plots were demarcated and mapped for Lagtthram production.

**Changzamtog lap demarcation:** The demarcation work of plots falling within Changzamtog LAP

*Reported by Mr. Kinga Loday for Phuntsholing and Mrs. Tashi Palden for Thimphu, Both are Sr. Survey Engineers*



*Arial phot of Khareyphug LAP in Phuntsholing*

of Thmphu Thromde that was commenced on 1<sup>st</sup> March 2016 completed on 30<sup>th</sup> April 2016 by 4 survey teams.

Changzamtog LAP extends over 86.73 acres of area and there are 254 thram holders with 263 plots out of which 48.78 acres of land is registered with private individuals. There are 7 institu-

tional plots. During the demarcation, 186 plots were found to be fine plots which accounted for 70.7 percent of the total plots.

In the process of plot demarcation, land pooling of 20% for plots without access road and 25% for others were applied.

## NCRP II completed in Zhemgang Dzongkhag

The National Cadastral Resurvey phase II in 8 gewogs of Zhemgang Dzongkhag completed in 2nd week of May 2016 which was commenced from 6th March this year.

The resurvey team comprised of 7 officials from NLCS including 2 Survey Engineers, 2 Surveyors, 2 Land Registrars and one IT official along with a team

of 60 Army Personnel who were trained in survey and Thram reading.

The team has verified 2063 cases of pending land issues including survey of Z plots and X plots. Z plots are those plots which were surrendered and reverted as State land by those landowners who couldn't pay excess land cost during the

New Sathram Compilation (NSC) time. The X plots are those plots left as forested land during New NSC exercise of 1985 to 2005.

During the course of survey, the team also verified pending cases, unverified plots, omitted cases and Kasho land.

## Organizational Development Implementation

*By, Tshering Tashi, HRO*

In accordance to approval of the Cabinet, the National Land Commission Secretariat established two departments viz., Department of Land Administration and Management (DoLAM) and Department of Survey & Mapping (DoSAM). Each Department has three Divisions.

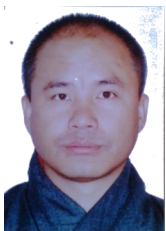
The three Divisions under DoSAM includes the Geo-

informatics Division, erstwhile Map Production Division, Cadastral Information and Topographical Survey Divisions. Rural land division, urban land division and land management Divisions are under DoLAM.

Mr. Yeshi Dorji and Mr, Tenzin Namgay, both Chief Land Registrars were appointed as the officiating Directors of DoSAM & DoLAM respectively.

The Legal, Policy and Planning and Human Resource Sections have also been upgraded to respective Divisions.

The OD approved structure includes the Customer Care Unit, Centre for Geo-information, Archiving and Internal Audit Section



*Mr. Yeshi Dorji  
Officiating Director  
Department of Survey & Mapping*



*Mr. Bishwanath Pradhan  
Chief, Topographical  
Division*



*Mr. Tashi  
Head, Cadastral Information  
Division*



*Mr. Geysar  
Head, Geo-informatics  
Division*



*Mr. Tenzin Namgay  
Officiating Director  
Dept. of Land Administration & Management*



*Mr. Binoy Tamang  
Head, Urban Land  
Division*



*Mr. Chokila  
Head, Rural Land  
Division*



*Mr. Jigme Tenzin  
Head, Land Management  
Division*

## Land lease rate Revision underway

On 9th June, 2016 officials from PAVA under DNP, Ministry of Finance made a presentation on the revised rate on lease of State land for various activities.

The section 309 of the Land Act 2007 states "A lease fee shall be levied at the rate fixed and revised by the Government after every 5 years notwithstanding any provision in the lease deed to the contrary." The existing lease rates were fixed in 2009.

It has been observed that land lease rates came into effect in 2009 and have not been revised since.

The three computation methods of land value formula, land value recovery approach and percentage of land value were explored for revision of lease rates.

A comparison of the three approaches has been made and it is found that the highest lease rate results from the Formula approach. As the percentage increases from the existing



*Officials from PAVA presenting revision of lease rates*

lease rates are formidable, it will be too high for any lessee. The Value Recovery Approach is found to be lowest of the three. If this approach has to be implemented it would result in most of the lease rates falling even lower than the existing lease rates. The third approach which is the Percentage Value Approach has its values somewhere in between the other two. Therefore, PAVA has recommended that the third approach which is the Percentage Value Approach be considered as basis for revision of lease rates.

With the revised land lease rates pegged to the land compensation

rates, it is believed that equity with uniformity, to a certain extent be covered.

Having pegged the land lease rates to the land value the land lease rent will be increased in general except for some of the smaller urban areas and Tsamdro, where it will be decreased. The increase is genuine considering that the earlier rate was way below what it should have been.

The PAVA will have to further submit the revised lease rates to the government for approval.



## Towards promotion of the National Language

As a part of the planned activity of the Secretariat under Dzongkha Development Program, Dzongkha extempore speech competition was organized on 27<sup>th</sup> May, 2016.

Seven participants were nominated from different Divisions under the Secretariat representing respective Divisions. The participants were provided 5 minutes each to speak on the topic they picked through a lucky dip system.

The main objective of conducting the Dzongkha extempore speech competition was to promote spoken National Language.



*The Winner of the Competition  
Mr. Sangay Tshering  
Land Record Assistant,  
Urban Land Division*



*The runners up  
Mr. Pempu Tshering  
Survey Officer  
Topographical Division*



*The second runners up  
Mr. Leki Khandu  
Land Registrar  
Rural Land Division*

The marking was based on the participant's confidence level, speech within context, pronunciation, presentation skill and time management.

Mr. Sangay Tshering, Land Record Assistant of Urban

Land Division bagged the first prize and Mr. Pempu Tshering, Survey Officer of Topo Division was the runner up. Mr. Leki Khandu, Assistant Land Registrar was the winner of third prize.

## GIS for Land and Resource Management

A 4-week training on GIS for Land and Resource Management was held at Royal Thimphu College from April 18<sup>th</sup> to 29<sup>th</sup> 2016. Total of 18 staff of NLCS including Surveyors and Mappers from various Dzongkhags and the Secretariat attended the training.

The course covered following subjects designed to meet the specific needs:

- Working with ArcGIS for planning
- ArcGIS for Analysis
- Working with Geodatabase
- Working with ModelBuilder
- Using Spatial Analyst for



*Training participants with trainers*

- ArcGIS
- Global Positioning Systems (GPS) data collection and integration with ArcGIS and
- Google Earth Pro and ArcGIS online.

ArcGIS is a geographic information system (GIS) for working with maps and geographic information. It is used for creating and using maps; compiling

geographic data; analyzing mapped information; sharing and discovering geographic information; using maps and geo-

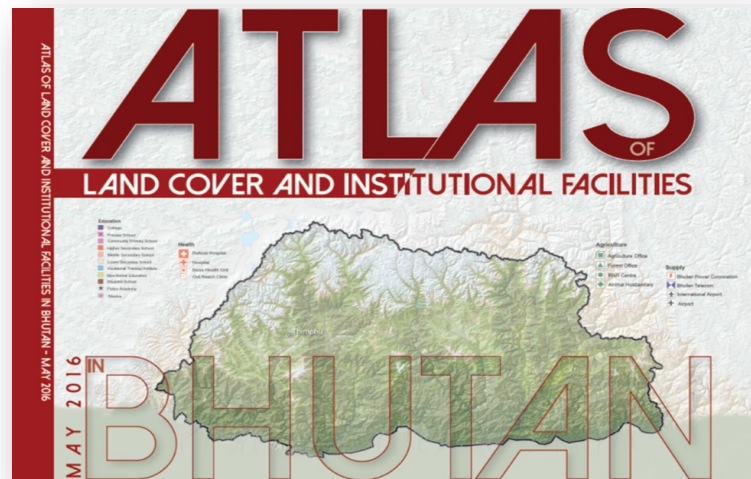
graphic information in a range of applications; and managing geographic information in a database.

## The First Atlas of Bhutan launched

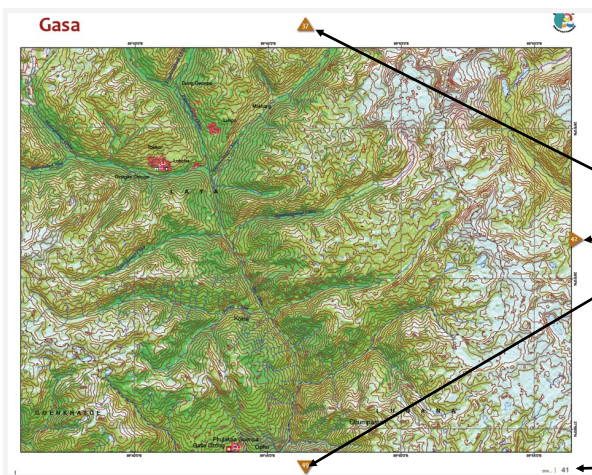
His Majesty the King launched the first Atlas of Bhutan on the sidelines of the rehabilitation land kidu programme in Dawathang village in Jomotshangkha on June 23, 2016. The NLC published the atlas in celebration of the auspicious year of the birth of His Royal Highness the Gyalsey.

A team of cartographers prepared the atlas since 2014 and were periodically guided by two renowned atlas makers from the Netherlands.

The atlas covers two thematic



Outlook of the Atlas Cover



**Note**  
 These three numbers at sides of the atlas page indicate that map continuity of this current one is available in these page numbers

Page Number

areas of land cover and institutional facilities.

The atlas will be useful for students, tourists and policy makers in better understanding Bhutan's special geography.

The National Land Commission is

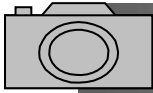
deeply humbled and honoured with such rare opportunity for His Majesty who has ultimate refuge and authority over the land, launched the Atlas of Bhutan.

Cultural atlas which will include

historical and religious sites and atlas for tourist are in the pipeline. The work on cultural atlas, in collaboration with the Department of Culture has already started. The atlas would be useful for conservation and identification of the cultural sites in the country. On the other hand, the tourist atlas will facilitate tourist industries to locate hotels, trekking routes, and heritage sites of interest for visitors.

**Tips for reading atlas:** If you are looking for continuation of the map from the page you are reading go to the page number indicated at three corners of the page.





# Snapshot: Integrated Training Program for NLCS staff



*X Batch Trainees with the Chief of Police Brigadier Kipchu Namgyel*



*XI Batch Trainees with the Chief of Police Brigadier Kipchu Namgyel*



*XII Batch Trainees with Major Sonam Tshering, Commandant of SRPF*



## Basics in Making Maps (Cartography)

*A presentation on “We make maps”*

On the 10<sup>th</sup> June 2016 Mr. Wim Feringa, a faculty of Geo-Information Science and Earth Observation (known as ITC) in the Netherlands, presented the basic techniques of making maps.



*Mr. Wim Feringa,*

*Specialized in Cartographic production line, Map design and production, Atlas design and production, web design for dissemination of geo related information*

A map is defined as a representation, usually on a flat surface, of a whole or part of an area or a surface of the earth. It depicts specific features in relation to space and time that a map aims to represent.

There are many different types of maps such as political boundaries, population, physical features, natural resources, roads, climates, elevation (topography), and economic activities among others.

Mr. Wim stated that maps should be easy to understand for readers at the first glance. He stressed that all necessary requirements of the features pertaining to the theme of the map should be shown while

unnecessary features be avoided.

The best way to represent particular theme is with color gradient method with one color for one thing or by using circle legend. For example, population density map could be drawn in either color gradient method or using circle size. The darker the color would mean place with high population density and the lighter the color would show the places with low population density. Likewise, the same population density map represented by circle could be shown places with high population with larger circles while smaller circle would indicate low density.

He illustrated the difference between the modern and conventional maps which is not so easily understood until we refer legend. In contrary, one could easily make out by instant glance at the modern map.

In general, all map should contain international boundaries, coastal lines if any, political boundaries, neighboring countries name, sea or ocean if any and only others required for particular theme.

Compared to the conventional method of making maps manually modern map making has become relatively easier with introduction of mapping software and computers.

## People of Dawathang village savor a new life of delight

*Additional Information by Bijay Pradhan, Sr. Survey Engineer*

The rehabilitation project in Dawathang under Langchenphu Gewog of Jomotsangkha Dungkhag was initiated in July 2012 upon the Royal Command. The village covers an area of 71.98 acres.

31 households with total population of 197 people are settled in the new village. They are from Serthi, Lauri and Langchenphug villages. These far flung villages are located at two days walking distance from the Dungkhag Administration office.

The beneficiaries were all landless and economically disadvantaged people from Jomotsangkha Drungkhag.

Through the project the area was developed and provided with basic amenities including road and electricity connection.

The project also supported building of disaster resistant houses with three rooms and a toilet. The support included wage pay-



*Overview of Dawathang village*

ment for skilled labor, CGI sheet and timber while laborers were provided from respective household.

His Majesty the King granted land kidu of 50 decimals for residential purpose on freehold basis while additional cultivable land for agricultural purpose on use right basis. An average landholding of a household in Dawathang village is about 2.32 acres.

The households are provided with seeds and seedlings of agricultural and horticultural crops including supplies of agriculture tools and machineries such as

rice mill, atta chaki (flour mill) and cornflake machine.

Besides cultivation of maize, paddy and vegetables for their own consumption some people have started setting up piggery, fishery and dairy farming for income generation. Other such activities include ginger, potatoes and beetle nut plantation.

The life of the people in Dawathang village has transformed and profoundly benefited from rehabilitation project. The project was initiated at a cost of Nu. 23.741 million and completed in July 2014.



### Land Allotment

On June 5, 2016 Pemagatshel Dzongkhag administration allotted 27 commercial and 78 residential plots to business operators and land owners at Denchi. Denchi is a newly declared Thromde of Pemagatshel Dzongkhag where present Dzongkhag Administration offices and business set up will be shifted once the new Dzong construction is complete.

*Photo: Pema Tsheten, Surveyor*



## Mid Term Review of JICA Project

By Tenzin Norbu, Sr. Survey Engineer

NLCS implemented Development of National Geospatial Data project for the past one and half year in Bhutan with the financial assistance from JICA.

The midterm review of the project was conducted on June 8, 2016 in Thimphu among the stakeholders including CGISC member, JICA Bhutan Office and representatives from local government. The main objective was to review the progress and to incorporate changes in the plan of operation of the project by the user and stakeholders.

The project commenced in February, 2015 for development of 1:25,000 digital topographical map covering 11,000 sq km in the southern region of the country.

Geospatial data are essential for designing and carrying out pre-feasibility studies for development of any kind of infrastructure. So far the country



*JICA and NLCS officials during the Mid Term Review*

has been using the topographical base maps published in the 1960s, which are not up to date.

Over the last 70 years, there have been a significant changes in terms of land cover and use either through man-made or by natural calamities. Therefore, updation of the topographical base maps are opportune in facilitating decision making for the planning process.

Till date, JICA survey experts completed mapping and valida-

tion of south-eastern region using satellite imagery. For the south-western part of the project area, only mapping based on satellite image has been completed. However, the field validation will be started from October 2016. Subsequent to any satellite mapping, field validation is indispensable for accuracy and reliable data.

The project will be completed in 2017.

## Human Resource Development

By Tshering Tashi, HRO

**Training:** Mr. Ugyen Dorji, Sr. Survey Engineer of Geoinformatics Division attended a short term training on "Advanced Theories and Practical Exercise on the Geoid Computing" from 6 to 10 June, 2016 at the **Geoid School**

**Mongolia,** Ulaanbaatar in Mongolia which was organized by International Association of Geodesy.

### **Geo-Portal Management:**

Sr. Survey Engineers Mr. Nima Gyelpo and Mr. Kuenga Loday

attended the week long training on "Geo-portal Management" in June 2016 at Esri, India under Gol funding.

# KNOW YOUR LAND ACT

## The Land Act of Bhutan 2007

### Ownership of land upon registration in Thram

**Section 61:** The ownership of land shall be conferred to its owner upon registration of such land in the Thram in his name in accordance with the provisions of this act.

**Section 62:** No Government land or Government Reserved Forest land shall be transferred to private ownership except otherwise provided by the Constitution and as detailed under this Act.

### Land may be owned anywhere in the Kingdom

**Section 63:** A juristic person under section 58 of this Act may own land in more than one Gewog or Thromde within the Kingdom of Bhutan.

## Know the definition

1. Family land means land belonging to family members registered in the name of the head of the family.
2. Family means one or more individuals who are registered as a family under one unique household number issued and maintained by the civil registration and census authority of the Government.
3. Geodetic reference datum means a globally fixed point of reference for surveying and cadastral mapping.



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Or

visit our website: [www.nlcs.gov.bt](http://www.nlcs.gov.bt)

The Staff of NLCS volunteered for paddy cultivation at Dechenphug on 28<sup>th</sup> May, 2016. It was organized by Ministry of Agriculture and Forest.