

January  
2015

H

A

R

S

A

C

Report of Study Visit  
On  
“Geospatial Innovation into Modernization of  
Land Records”  
For officers of Department of Revenue, Govt. of  
Jammu and Kashmir



ORGANISED BY:



*An ISO 9001:2008 Certified Organization*

NLRMP Cell/Centre  
HARYANA SPACE APPLICATIONS CENTRE (HARSAC)  
Department of Science & Technology, Haryana  
CCS HAU Campus, Hisar-125004  
Ph. +91 1662 232632, 231047, Fax: +91 1662 225958

Web site: [www.harsac.org](http://www.harsac.org)

E-mail : [contact@harsac.org](mailto:contact@harsac.org)



## **About Study Visit**

**A team of Six Delegates of Department of Revenue Govt. of Jammu and Kashmir visited Haryana Space Application Centre (HARSAC), CCSHAU Campus, Hisar to understand the NLRMP-HRY Technique.**

The team arrived at 10.00 am on 28.01.15 Hisar. The team was received at HARSAC by Dr. R.S. Hooda, Chief Scientist, HARSAC, Dr. Sultan Singh, Senior Scientist & Project Coordinator NLRMP-HRY, HARSAC, Hisar along with Mr. Mahabir Arya, Revenue Expert, HARSAC and Mr. Vinod Bishnoi, Project Fellow, NLRMP Cell HARSAC,

### ***Technical Session***

A detailed presentation was given by Dr. Ramesh Singh Hooda, Chief Scientist, Haryana Space Applications Centre (HARSAC) on HARSAC and its activities. He briefed about HARSAC, its organizational, functional and Administrative structure. He said that HARSAC has completed 130 projects and 25 projects are ongoing in the field of mapping, monitoring and management of natural resources, environment & infrastructure. He told that HARSAC provides specialized services and solutions for implementing geospatial and GIS system. These includes technical consultancy, GIS database design and development, map creation/ updation and finishing, data migration/ conversion and format translation, software customization and systems integration. He apprised them about basic fundamentals of Land Resource Plan in different fields such as agriculture, water resources, forestations etc. He also told about academic training program & research activity for younger professionals that organized by HARSAC.

Dr. Sultan Singh, Senior Scientist & Project Coordinator NLRMP-HRY, HARSAC, gave a detailed presentation on NLRMP activities. Dr. Singh told about history and present land records at national level. He elaborated the work done under NLRMP like scanning/digitization of musavies, linking of RoR data to cadastral maps, development of document management system, survey/resurvey using ETS/DGPS and creation of DGPS based control / benchmark points in the state. He also briefed about gaps in Indian system that there is no title records, multiple handling agencies which leads to lack of coordination. Our deed registration system doesn't convey the guarantee of title, it simply conveys presumptive title. Urban land records & registration is a separate system and there

are gaps among various records and its solution lies only in NLRMP. He explained the physical status of NLRMP in Haryana state. He stated the surveying method of earlier days and discussed about effectiveness of the new generation tools like aerial photography and cadastral mapping methods in detail.

He apprised the team about the advantages of using satellite data which are as under:

- Area coverage is more
- Data acquisition is faster
- Data processing is faster
- Minimum ground control required
- Less ground work
- Cost and time effective
- More accurate, precise 3D and 2D mapping
- Error due to slope is removed
- Permanent record of physical features so verification of data and future reference is possible
- Easy updating possible
- Existing Network of GPS stations established can be used for network survey

### *Demonstration Session*

In this session team visiting GIS & Photogrammetric lab. Live demonstrations were shown on various activities related to NLRMP-HRY. Dr. Sultan Singh in order to grow awareness delivered lectures about the details regarding process of ROR, vector generation of land records and its accuracy. The team members had a detailed discussion about Photogrammetric process and its accuracy. They were shown the process of using these technologies in unconsolidated village in detail that and how easily this technology can be used with the help of satellite image. Team also visited the district record room and understood the live process of scanning of old revenue records document, metadata generation, uploading the same into server and live demonstration of HLRDMS software and also live process of HALRIS & HARIS at

Tehsil office. A live demonstration was given to them regarding online registration process in detail and also online generation of Jamabandi.

### *Field Visit*

A field visit was also arranged, they were shown the primary and secondary control points which have been installed in tehsil office campus at Siwani (Distt. Bhiwani), under NLRMP project. They were also shown the rectangular stones known as Murabba stones in the field, which were affixed during consolidation from the year 1952 to 1960. They also visited the Patwar training School at Azad Nagar, Hisar and had a detailed discussion about training program for Patwaris with the principal of PTS Shri. Satish Bishnoi.

Delegates were very much impressed by the different presentation given on different application of satellite techniques. They were fully satisfied with the boarding and lodging arrangements and other conveyance provided to them during their visit. Thus the three days visit of the delegates ended with the vote of thanks.

### *Glimpses of HARSAC Gallery*



Dr. Sultan Singh brief about HARSAC's User Room



A detailed presentation by Dr. Ramesh Singh Hooda, Chief Scientist, HARSAC on HARSAC and its activities



Live demonstrations on various activities related to NLRMP-HRY by Dr. Sultan Singh



Showing the primary and secondary control points which have been installed in tehsil office campus at Siwani (Distt. Bhiwani), under NLRMP project.



Team also visited the district record room and understood the live process of scanning of old revenue records document