

## **Blockchain for property governance conference- 9th Aug, 2017**

Organized by India Institute. The speakers were Vishal Batra, IBM Research, Vishnu Chandra, DDG of Remote Sensing and GIS , National Informatics center, Sunil Kumar, Landesa, Ambrish Mehta, ARCH, JA Chowdary, Special Chief Secretary &IT Advisor to the CM, Andhra Pradesh

### **Blockchain for property governance**

Blockchain- "A blockchain with regard to property rights is a digital ledger, a record of accounts, of who owns what, and when. When applied to records of property titles, blockchain will eliminate the scope for forgery, tampering and destruction of records. It allows for smart contracts, and makes land title transfers much more convenient and efficient."

Blockchain will digitalise the land records as paper document and carrier cannot always be trusted. Digital documents help in proactive governance. It will also help in uniform enforcement of laws rules and regulations. Experiences for Georgia and Sweden reveal that use of blockchain may allow more secure mortgages contracts and mineral rights. The technology is being used on pilot basis now and the results seem impressive. But the cost of installing and maintaining such technology is quite high.

### **Multi Layer GIS and Blockchain**

Geo-spatial systems are used at a centralised level while blockchain could be used at a decentralised level. Use of blockchain in geo-spatial applications may bring new opportunities to enhance the value of location based services as part of decentralised distributed workflow based systems.

### **Challenges for distributed land records**

Due to faulty land records more than 50% of rural India does not have land. In the state of Andhra Pradesh nearly 76% of rural population does not have land. Though the farmers are cultivating from many years now. However the farmers are not getting crop insurances, crop loan etc as they do not have land registers in their names in the government records. There are three important things that are a must in order to claim the land- 1. have possession to land, 2. Documents, 3. should be updated in various government department records. Even though digitization is happening the data being entered is faulty and outdated. For any good digital system or data cleansing there is a need for community involvement. There is a need to train local people on land laws and land records, collect land data house to house, create land problems register and enter correct data into the system.

### **Benefits of involving community-**

1. Will give employment to the local youth
2. The cost on the state is less.
3. The physical copies of the land records will go to the village
4. The community will get to know the problems
5. Debate and discussion on land will be initiated
6. Finally rightful owners can get land pattas.

### **Social Mobilizers handle GPS for ensuring land titles under Forest Rights Act.**

Then Action Research in Community Health and Development (ARCH), Gujarat came up with the idea of using GPS (global positioning system) devices. Holding a GPS device, a tribal simply walked around the perimeter of his plot and pressed some buttons. The device automatically sketched a map of his farm, with the right latitude and longitude and exact area. This enabled every family to produce a map of its holding, and get it verified by the gram sabha. All individual maps were then superimposed on a satellite image of the village dating from 2005 (the deadline under the Act). This produced a detailed map showing the exact size and ownership of every plot. Land disputes arose if two villagers walked over the same area, and disputes were settled by the gram sabha before certification. Any encroachment on forest land after 2005 showed up clearly after superimposing today's maps on the 2005 satellite image. Thus this provided quick solutions to the land disputes of the people and also titles were guaranteed under FRA.

Government of AP is organizing Global blockchain summit in Oct 2017. This is to connect the blockchain community, government bodies and the industry stakeholders to create business and investment opportunities.