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# Panchayat and Town surveys and its Maintenance

**A.Venkateswara Rao, *B.Tech.***

Deputy Director  
Survey & Land Records  
Hyderabad District.



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# Introduction

- Town survey was conducted in Hyderabad District during 1964-1971 under provisions of AP Survey & Boundary Act 1923.
- Records were implemented in 1981-82.
- Notices were issued calling objections after completion of survey.
- Correlation was very difficult as the area was built up and some records were not available.



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# Block formation

- Wards formation .
- Closed, medium, open blocks 10,40,160 acres respectively
- Village boundary, roads, streets, streams as block boundaries.
- Different scales for different types of maps  
1:500,1:1000,1:2000
- Preparation of I sketch an Index map.



# Preparatory work

*Town Survey is conducted as per rules prescribed in Chapter XIII, Survey Manual Vol. 1*

- Resolution of Municipality.
- Publication of notification u/s 5
- Publication of notification u/s 6(1)
- AD send spl notices to Municipal Chairman, District Collector and RDO and intimate the date of survey
- Obtain relevant records from CSO
- Call for the details of govt. lands.
- Call for details of municipal lands.
- Collect records of all earlier surveys.
- Call for assessment register and locality maps from municipality.
- Intimate probable date of completion-appointment of Final Check Officer
- Joint inspection of boundaries of municipality



# Traverse and detailed survey

- Traverse survey along block boundaries
- Traverse Stones located in road to be planted beneath the road surface.
- Preparation of 'Tie' line register.
- Inform municipal commissioner the place of detailed survey to divert traffic.
- Offsets to be taken by putting cross staff in bucket filled with sand.
- Issue prior notice to individual before surveying individual holding.
- Demarcation with stones, tar marks, stones marks.
- Preliminary demarcation sketch.
- Rough land register.



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# Preliminary demarcation work

- Preliminary demarcation sketch
  - Old survey numbers in red ink
  - New TS nos.in black ink
  - Encroachments in red broken line and yellow colour wash
  - Walls in double lines with blue
  - Public properties by symbolic letters
  - Road names, topo details
  - Location showing the block and old village boundaries



## Measurement work

- Offsets from traverse lines
- Common/independent compound wall
- Measurement nearest to 20cm
- Arbitrary g-lines
- Limit of error 1 in 2000 for ward and 1 in 1000 block boundaries
- Allowable error 30 cm

## Records prepared

- Plotted demarcation sketch prepared
- Rough block map prepared
- Rough area list
- Fair correlation sketch Land Register in prescribed form
- Encroachment Register
- Correlation statement
- Notices served upon individuals



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# Mapping Work

## ROM Prepared at

- 1:500 for closed blocks
- 1:1000 for medium blocks
- 1:2000 for open blocks

## Ward map Prepared at

- 1:2000 for closed blocks
- 1:4000 for medium blocks
- 1:8000 for open blocks





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# Records

- Town survey land register.
- Record of measurements
- Correlation sketch, register.
- Plotted demarcation sketch.
- Traverse set up
- Tie line registers
- Encroachment register
- FCO disposals.
- Notices/notifications under Sections.5,6,9(2),13 Of S&B Act



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## Classification of Lands

- Lands owned by Govt. - G
- Lands vested with Municipality – G.V.M
- Lands alienated in f/o of Municipality – G.A.M
- Lands alienated to bodies other than Municipality– G.A
- Lands belong to Municipality by acquisition, - M  
Private purchase etc.,



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# Precautions

- *Issue 6 notices to individual land holders under proper acknowledgement.*
- Issue notices under section 9(2) to all registered holders.
- Supply required records, issue clarifications sought by Final Check Officer.
- Take prompt action on encroachments.
- Special interest on G-Abadi lands.
- Preserve all notices.
- Preserve FCO disposals.



# Maintenance

*At present Town Survey Records are being maintained as per BSO 34-A, paragraph 21, Appendix-XIII*

- Appointment of Town surveyor.
- Sanction of sub-divisions. Chairman/RDO
- Correction of errors.
  - Minor clerical errors
  - Other errors
- Incorporation of changes.
- Encroachments regularization.
- Land grabbing cases.
- Encroachment register
- Stones Registers, renewal



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## New entities

- Apartments
- Undivided share
- Deviation from sanctioned plan
- Common areas
- Corporate bodies and associations
- 3d mapping required



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# Panchayat Survey

- Streets are surveyed
- To avoid encroachment of streets
- Boundary between streets and private properties are surveyed
- All the habitations in panchayat are covered
- Index map prepared



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# Panchayat Survey

- Pd sketch prepared
- Traverse along streets
- Encroachment register prepared
- No land register prepared
- Names of owners written on map
- FMS prepared
- Reconciliation sketch is prepared showing cadastral survey numbers
- Appointment of FCO
- Issue of 9(2) notices
- Publication of 13 notification



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# Manual method (*Chain & Cross Staff*)

- Time taking.
- Less accurate.
- Not economical.
- Errors may creep in data entry.





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# Methods of Surveys

- **ARIAL PHOTOGRAPHY**
  - Land holders believe in Physical measurement of fields.
  - Field supplementation very high particularly in areas having tree coverage, where there is no compound wall demarcating the boundary of land parcel becomes issue.
  - Accuracy levels not sufficient for very small holdings. Particularly cluster of houses and slums.
  - Roof tops are captured in Aerial photo where as plinths are to be mapped.
  - Ortho photo accuracy.



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## GPS - ETS Combination

- Bit expensive
- Requires skilled ETS and GPS ,CAD operators
- Tape and laser rangiers required for some measurements
- HRSI to be procured for minimizing location work
- Very accurate (5cm)

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THANK YOU