

## **Minutes of the Annual Meeting of Head of Offices, Soil & Land Use Survey of India, April 07-08, 2016 at HQ**

Annual Meeting of all the Head of the Offices of Soil & Land Use Survey of India (SLUSI) was held on 7<sup>th</sup> & 8<sup>th</sup> April, 2016 at HQ office under the chairmanship of Dr. Virender Singh Arya, Chief Soil Survey Officer, to review the technical and administrative matters with special emphasis on reviewing the progress in respect of Physical and Financial Targets/Achievements during the year 2015-16 and formulation of Action Plan for the year 2016-17. List of participants is appended.

Dr. Virender Singh Arya, Chief Soil Survey Officer, welcomed all participating officers and made inaugural speech about agenda to be taken up in the meeting.

In his opening remarks, CSSO has stressed need, while focusing all out efforts to achieve physical target w.r.t. field work, publication of reports by the centers they should also focus on new scientific innovation techniques & apply it in organization. At the same time, he emphasized the need for promoting the use of SLUSI data among the user agency in formulating action plans for farmers welfare scheme through agriculture/watershed development. CSSO asked all centre heads to establish contact with state Govt. agencies implementing the watershed development scheme for sustainable development of agriculture in their jurisdiction & explain importance and utility of data base generated by SLUSI.

Stating importance of adopting new scientific techniques in the organization, he explained that during last field season the use of “Onscreen Interpretation Technique” has resulted in significant savings of time in finalization of prefield interpreted maps of the surveyed area. The cartographic division which was earlier involved in final map preparation could be spared and their services utilized in scanning and digitization of old maps to convert it in digital format. And also the officials spared more time in report writing to curtail down the pendency of reports. This has significantly increased the number of completed reports in the organization.

He told that the organization has very sound & rich database and GIS facility that can be used for sustainable & equitable development in terms of maintaining soil & land health while increasing productivity/ by way of designing scientific sustainable land use plan.

The progress of all the centers in respect of physical targets and achievements during the year 2015-16 was reviewed. The action plan for the year 2016-17 was also discussed in detail and physical targets regarding soil survey, clearance of pending reports, preparation of digital Microwatershed Atlas of India and short duration course/training programs for user departments were finalized.

The technical matter and administrative issues were discussed in detail and the following action points were emerged:

1. Regarding achievements of the physical targets allotted in respect of Detailed Soil Survey (DSS) during 2015-16, field work for area of around 9.01 lakh ha. has been completed against the total target of 8.80 lakh ha. The detail of survey area is furnished below.

(Area in lakh ha)

Centre	Type of Survey	Target	Achievement	Remarks
Ahmadabad	DSS	1.60	<b>1.63</b>	Part of Taluka Lalpur and part of Taluka Kalavad, district Jamnagar, GUJRAT under RADP.
	SRM	0.11	<b>0.11</b>	Daman & Diu Districts (union territory )
Bangalore	DSS	0.90	<b>0.98</b>	Tunga Bhadra Catchment, KARNATAKA
	SRM	2.35 2.50	<b>2.34</b> <b>2.56</b>	Kozhikode and Kollam districts of KERALA under consultancy project of <i>Kerala State Land Use Board (KSLUB)</i> .
Hyderabad	DSS	1.30	<b>1.19</b>	Rain fed Area un der TELANGANA
Kolkata	DSS	0.90	<b>0.93</b>	Rain fed Area of Purulia district of WB
Nagpur	DSS	1.30	<b>1.32</b>	Narmada Catchment (MP) & Jayakwadi Catchment (MS)
Noida	DSS	1.50	<b>1.70</b>	Ramganga FPR Catchment, Almora of UK, Rampur & Moradabad of UP
Ranchi	DSS	1.30	<b>1.26</b>	Rain fed Districts of JHARKHAND STATE
<b>Total</b>	<b>DSS</b>	<b>8.80</b>	<b>9.01</b>	<b>(Target achievement 102%)</b>
	<b>SRM</b>	<b>5.01</b>	<b>5.01</b>	<b>(Target achievement 100%)</b>

It was also decided to increase the physical target for carrying out field work under DSS for the year 2016-17 to 10.00 lakh ha. The detail of area to be undertaken centre wise is as under:

(Area in Lakh ha)

Centre	Type of Survey	Target	Remarks
Ahmadabad	DSS	1.50	Taluka Dharol and Kalwad (part), Dist- Jamnagar, Gujarat
Bangalore	DSS	1.50	45 MWSs of 4C1 Catchment-Karnataka state
Hyderabad	DSS	1.30	4D6B7, 4E5A5 watersheds of Nagarjunsagar Catchment, Rangareddy and Mehboobnagar District, Telangana State.
Kolkata	DSS	1.20	Manbazar Block – I, Purulia block-I & II and Para block, Dist- Purulia (WB)
Nagpur	DSS	1.50	Narmada Catchment (Madhya Pradesh) & Jayakwadi Catchment (Maharashtra)
Noida	DSS	1.70	a) Moradabad (Utter Pradesh), Ramganga Catchment, b) Jhansi (Utter Pradesh), Betwa Catchment.
Ranchi	DSS	1.30	Ranchi (part) & Khunti rainfed Districts of Jharkhand state
<b>Total</b>	<b>DSS</b>	<b>10.00</b>	
	<b>SRM</b>	<b>55.19</b>	(Outsourcing of work to ORSAC, Bhubneshwar and DEERS, Jammu & Kashmir)

(Action: HQ & All Centres)

2. To **enhance the skilled technical man power and for updating of the knowledge of officers working under user department, it was decided that every centre will organize at least one training program for officer/staff of user agency during the year 2016-17.** All heads of offices instructed to communicate the schedule of training program along with budget requirement at least one month before the schedule date of training to head quarter. It was also instructed while intimating the details of training to user agency; centre should clearly specify on their brochures that **“lodging & boarding will be provided by SLUSI”**.

**(Action: all Centres)**

3. To develop the **scientific aptitude and scientific skill development** among the technical man power of the organisation and also to promote the database generated by organisation on scientific platform the activity of scientific paper publication work needs to be encouraged in the organisation. Last year four number of scientific paper were published in reputed national scientific Journals. To increase the paper publication work it was decided **that during this year i.e. 2016-17 every centre shall publish at least two papers in national/international journal** focusing the departmental activity so as to take up activities of the organization on scientific platform, as the database generated by SLUSI also serve the country scientific need for preparation of land use plan before it is roll out in the form of scheme in any area.

**(Action: HQ &all Centres)**

4. It was decided that **all centres should prepare their strategy for proactively secure at least one project either for generation of database on soil & land uses or monitoring of state program on watershed based agricultural developmental program.** In this regard the needful communication & delivering of presentation about the importance of relevant data in planning & expertise of SLUSI in the developing of soil and land use database by following scientific techniques using Remote Sensing and GIS should also made to state govt implementing agencies in the states under the jurisdiction of each centre. The database of SLUSI will helps for maintaining soil health while increasing productivity/profitability of end user by way of implementing scientific sustainable land use plan.

**(Action: HQ & all Centres)**

5. The organisation has completed the digitisation of state-wise delineated & codified micro-watershed of whole country except Odisha state and to prepare seamless digital micro-watershed atlas (MWA) of country. It was decided that **Bangalore centre** will carry out mosaicing of state/UT namely Andaman & Nicobar Islands, Andhra Pradesh, Goa, Karnataka, Kerala, Lakshadweep, Pondicherry, Talengana and Tamil Nadu. **Kolkata centre**

- Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and West Bengal. **Nagpur centre** – Chhattisgarh, Dadar & Nagar Haveli, Daman & Diu, Gujarat, Madhya Pradesh and Maharashtra. **Noida centre** – Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Uttarakhand and Uttar Pradesh. It was also decided that during completion of MWA of Odisha, the mosaicing of area with Andhra Pradesh, Chhattisgarh, Jharkhand and West Bengal will be done by **Hyderabad centre**.

**(Action: HQ & Bangalore, Hyderabad, Kolkata, Nagpur & Noida Centres)**

6. As decided in last meeting to stop all manual operation in cartographic section and use the services of cartography section for conversion of hard copy maps and report in to digital format. **It was decided that cartography staff of all the centres should be deployed to scanning & digitization of old DSS/RRS maps.** For that the complete list of un-digitized report is to be supplied to all centres by RSC Noida & centres have to count the number of maps to be digitized with their size (A3, A5, A0 etc.). Accordingly every centre will prepare the inventory of maps to be digitized for spatial database generation & also w.r.t. non spatial data. It was decided that guide to mapping units (Appendix-III) should be prepared in soft copy format probably excel sheets which will be attached to their respective spatial or map data.

**(Action: HQ & all Centres)**

7. It was decided in the meeting that to enhance the skills & expertise of Field officers and officials (FO/AFOs) in scientific database development via onscreen (pre-post field) data interpretation in GIS using high resolution satellite data, **three days basic training for onscreen satellite data interpretation using GIS for development of scientific database on soil & land resources will be organized at Remote Sensing Cell, Noida in the month of July-August, 2016 all heads of offices were instructed to sent list probable participant in the centres to head quarter.** Similarly, **orientation training programme will be organized at Nagpur Centre during the month of Sept.-Oct. 2016 for the newly recruited AFOs immediately after their joining.** This training programme will be of five days where in all basics of soil survey techniques for generation of soil & land database and how to use the database in preparation of land use plan will be explain to newly recruited AFOs and to give first-hand information about the activities of organization.

**(Action: HQ & Nagpur Centre)**

8. During the last annual meeting the centre heads assured to be cleared 112 draft reports of different survey whereas only 50 drafts were approved during the year. **The progress to**

**clear the pendency by all centres especially Ranchi, Bangalore, Hyderabad centres has been viewed seriously** and the centre were instructed to follow the action plan/strategy that it has submitted for clearing of pendency in 2016-17. It is also observed by the HQ, that the follow up of officers with field official is poor, this affect performance of centre results in non fulfilling the target w.r.t. clearance of pending reports. Action needs to initiate against the officer/official who are not following the order. All the Heads of the centres directed to take up the pendency of reports on priority basis.

According to the work plan submitted by the centre heads, the action plan for **assured to be clear** the pendency of pending reports along with drafts of area surveyed during 2015-16 as given below:

Centre	RRS	DSS	SRM	Total
Ahmadabad	1#	10+2*	12	25
Bangalore	-	3+2*	8+2*	15
Hyderabad	5	6+3*	6	20
Kolkata	5	3*	22	30
Nagpur	1	4*	1	6
Noida	14	5+4*	-	23
Ranchi	1	2+4*	9	16

\*Draft reports of area surveyed during 2015-16.

#Report is to be taken up by Sr.S.S.O., Noida- He has to develop RRS from SRM

**(Action: HQ & Centres)**

9. To enhance the Digital Data generation at centres, **it was decided to upgrade the GIS Lab established at centres by purchasing nine numbers of new Arc view (Arc GIS) licenses.** These licenses shall be distributed one each at Bangalore, Kolkata & Nagpur centres and two each at Ahmadabad, Hyderabad, and Ranchi centres for carrying out on screen cartographic work, soil mapping work, map composition and the generation of Digital Soil Database etc.

**(Action: HQ & Centres)**

10. In review of pendency of soil sample for analysis and reports, CSSO has suggested for internal cooperation amongst all centres for clearing pendency of soil samples & pending survey reports by sharing work load of centre having higher/large size of pending of report/sample for laboratory analysis due to non-availability of man power at centre. **It was decided that Hyderabad centre which is having 1359 pending soil samples should share 150 each to Nagpur & Noida and 100 samples to Bangalore centre. Similar instruction was also issued to Ahmadabad to clear the pendency of soil samples.**

**(Action: all Centres)**

11. It was observed that centres are not following submitted action plan for clearance of pendency of reports/draft of soil survey & soil samples analysis work in soil laboratory. **It was decided that centre while submitting the details about strategy/action plan in the next meeting for completion of pending work, should clearly spell out the time and man power required at various stages viz. Map finalization/lab. Analysis, data entry, report drafting .i.e. so as to effectively complete the task within agreed time frame.**

**(Action: all Centres)**

12. Taking into account the physical pendency of soil samples at various centres and shortage of laboratory staff and the urgency to complete soil analysis to expedite report drafting work. It was decided that the monthly target for analysis of soil samples should not be less than 80-100 samples per month. If required by engaging one AFO official who is having experience in laboratory analysis work to completely exhaust the pendency in the same year itself.

**(Action: all Centres)**

13. Regarding one stolen vehicle of Noida Centre, it was instructed that centre should make regular follow up action for search of vehicle with state government authorities by postal/personnel communication so as to ascertain the status of search for vehicle under intimation to HQ office.

**(Action: Noida Centres)**

14. The audit paras have been found in various matters at centres & HQ office. It was advised that centre head should pay proper attention to ensure that the matters should not be repeated in procedure during current financial year to avoid the possible audit paras. It was also decided that the audit paras may be dropped, subject to the next audit inspection in respective offices. This too needs the attention of office heads to get it clear.

**(Action: HQ & All Centres)**

**1. Review of the action taken on the minutes of the Annual Meeting held on May 05th, 2015 at HQrs, New Delhi**

S. No.	Action Point	Action Taken
1.	<p>As per the minutes of last meetings and regular instruction of HQ, only 20 reports of DSS and 12 reports of SRM submitted during the year 2014-15, while it was decided to clear 28 reports of DSS and 35 reports of SRM. <b>The slow attention to clear the pendency, by Hyderabad, Noida and Bangalore centres has been viewed seriously.</b> All the Heads of the centres directed to take up the pendency of reports on priority basis.</p> <p>HQ suggested, using the existing man power at centres, in effective manner. It will also be helpful to devote more hours beyond the working time, to clear the pending works, at centres. Heads of offices assured that they will take every efforts including working for more hours to clear the pendency of reports. <b>In case of non-compliance of clearing the reports &amp; achievement of the physical target, Head of the Office would be held responsible.</b></p> <p style="text-align: center;"><b>(Action: HQ &amp; Centres)</b></p>	<p><b>Ahmadabad:</b> DSS Reports: Three reports have already been published; four draft reports submitted to the HQ and two reports are under drafting. Similarly eight reports are under process of map finalization, area calculation &amp; tabulation. SRM Reports: Out of the total 25 reports, one draft report has been submitted to HQ; Six reports submitted to the NRSA along with surveyed maps, sixteen reports are under process and the maps of the two districts such as Bhavnagar and Junagadh has been sent to RSC, Noida.</p> <p><b>Bangalore:</b> Centre published 5 SRM reports and 1 DSS report during 2015-16. Two DSS reports were submitted to the HQ. But are returned for village-wise/mws data incorporation.</p> <p><b>Hyderabad:</b> The plan to clear pendency of reports has been made. Since September, 2015, one DSS and one report of SRM sent to HQ. Scanning done for digitization of SRM report of Khamam district. Maps of RR Survey report are scanned for digitization. However there is acute shortage of Field Staff.</p> <p><b>Kolkata:</b> Advised is being followed and an action plan has been prepared to clear the pendency of Reports as directed by CSSO. 18 reports have been processed of which 05 nos DSS, 01 no of RRS &amp; 10 nos of SRM have been published up to March, 2016. Brochure on Soils of SIKKIM, Soils of 24Pgs district (South) and Database on Tista Catchment (Sikkim &amp; West Bengal) and Brochure on Micro watershed Atlas of West Bengal have been prepared.</p> <p><b>Nagpur:</b> The reports are being processed at faster rate and more attention is given to published current year report within six months.</p> <p><b>Noida:</b> Three reports of RRS and Two reports of DSS are published; five reports of DSS submitted to HQ for approval and RRS-14 &amp; DSS-4 nos. are under editing.</p> <p><b>Ranchi:</b> Being followed.</p> <p><b>HQ:</b> Progress is not satisfactory. Time to time instructions in writing and through telephone too; have been given to all the centres, to give more emphasis to clear up the pendency of reports by using available manpower in effective manner and to spare</p>

S. No.	Action Point	Action Taken
		extra time beyond the office hours.
2.	<p>Review of the state wise micro watershed atlas (MWA) of India was also performed. It was decided that the MWA of remaining states will be taken up during the year 2015-16. The MWA of J&amp;K and UP was allotted to Noida centre while the Odisha state had to be completed by Hyderabad centre. Assam state was allotted to Kolkata centre and the Lakshadweep UT to Ahmadabad centre. <b>The very slow progress by Noida, Hyderabad and Kolkata centres has been viewed seriously and decided to call an explanation of Head of the Offices.</b> All the centres now directed to complete the task without further delay, within time frame given by the centres, as mentioned in Para 6C, page 20.</p> <p style="text-align: center;"><b>(Action: HQ &amp; Centres)</b></p>	<p><b>Ahmadabad:</b> MWA of Lakshadweep (UT) has been completed and sent to HQ.</p> <p><b>Bangalore:</b> Completed.</p> <p><b>Hyderabad:</b> MWA of Odisha- drainage map scanned and registration done for 80 percent of the sheets &amp; digitization under progress. Delineation &amp; codification done manually, spatial data request sent to Ranchi &amp; Kolkata for remaining area. ArcGIS Software to be reinstalled.</p> <p><b>Kolkata:</b> Completed.</p> <p><b>Nagpur:</b> MWA of Maharashtra and Manipur is completed, beside this the drainage layer of Utter Pradesh is submitted to HQ on 1.10.2015.</p> <p><b>Noida:</b> U.P. MWA: Delineation, codification completed and scans copy submitted to RSC, Noida for digitization. J&amp;K MWA: On screen delineation, codification using digital drainage completed and final rectification, edge matching with surrounding states is in under process.</p> <p><b>Ranchi:</b> Completed.</p> <p><b>HQ:</b> Progress is being monitored by HQ time to time and instruction has been issued to clear up the assigned work within stipulated time.</p>
3.	<p>Detailed Soil Survey (DSS) preferably conducted by using LISS-IV data on <b>1:10000 scale</b>, it has been decided to purchase the satellite data, at first for areas taken up for DSS. The Heads of offices directed to submit their requirement of satellite data to HQ, well in advance, in shape file. However, in case of non availability of Remote Sensing data cadastral maps may also be used for this purpose. DSS should be precise having GPS application to produce the exact location of profiles and auger observations also to develop village wise soil fertility maps for soil health management programmes.</p> <p>Now SLUSI is conducting DSS in rain fed areas of various catchments. The Chief Soil Survey officer has advised to all centres that they should identify more priority area for DSS after</p>	<p><b>Ahmadabad:</b> Cartosat/LISS IV data received from Hqrts is under process for the DSS work.</p> <p><b>Bangalore:</b> As per the action point, centre has been procured all the concern data. GPS readings of all the profile and auger observations location are being recorded by field staff regularly. Surface soil samples for soil fertility purpose have been collected. Care has been taken while allotting the DSS area as per the action point.</p> <p><b>Hyderabad:</b> DSS work has been taken up for 1.3 lakh Ha using LISS IV data on 1: 10000 scale.</p> <p><b>Kolkata:</b> DSS was carried out in RAINFED areas of Purulia district of West Bengal on 1:10000 scale using RS &amp; GIS Technique. LISS IV data received from HQ &amp; it was used for prefield interpretation.</p> <p><b>Nagpur:</b> The instructions are followed.</p> <p><b>Noida:</b> Moradabad (UP) rainfed districts have been taken for DSS work using LISS-IV data on 1:10000 scale in Ramganga Catchment. Data will be generated village/microwatershed wise having precise GPS application to produce the exact location of profiles and auger bore observations. Priority area for DSS will be identified after</p>



S. No.	Action Point	Action Taken
	<p>consultation with different Stakeholders. (Action: HQ &amp; Centres)</p>	<p>consultation with different stakeholders. <b>Ranchi:</b> Being followed, rainfed district Ranchi has been taken up for DSS. The fertility samples are being collected. <b>HQ:</b> LISS-IV data on 1:10000 scale for DSS, has been purchased and given to the concerned centres, as per their requirements.</p>
4.	<p>To produce precise digital spatial database on soil and land resources, SLUSI has procured thirty (30) numbers of hand held GPS; and has been distributed as four GPS each to all the seven centres and two numbers to Remote Sensing Cell, Noida . It was advised that the Global Positioning System (GPS) should be used for recording Lat/Long of Profile/Sampling site on the map, so that it could be used for execution of various soil and land based development programmes at micro/village level. It was also decided that the centre should ensure that the field parties working in the field must take lat/long information by using GPS for every sampling point and the same data may be incorporated in the final digital soil map using GIS. (Action: HQ &amp; centres)</p>	<p><b>Ahmadabad:</b> Four GPS have been received from HQ and given to four soil survey parties and they are using in the field for incorporation of the recording Lat/Long of profile/sampling site on the map. <b>Bangalore:</b> Instructions are given to all parties to record Lat/Long information of Profile / Sampling site on the map. <b>Hyderabad:</b> 4 nos GPS received from HQ and is being used for survey work in field by 4 parties. <b>Kolkata:</b> GPS is using for generating precise data base during field survey while carried out DSS and for generating LAT/LONG. &amp; elevation information for every sampling point. For generating micro/Village level information, locational details will be incorporated in the final digital soil map using GIS. <b>Noida:</b> Received four nos. Global Positioning System (GPS) from HQ and using during the field survey for recording Lat/Long of Profile/Sampling site on the map. <b>Nagpur:</b> The GPS is being used in the field and the data is incorporate in the digital map of DSS. <b>Ranchi:</b> Being followed. <b>HQ:</b> Instructions have already given to all centres to use GPS positively in the field to note down the location of the soil samples/profiles taken and to attach with the soil map.</p>
5.	<p>All cartographic and mapping (pre field and post field interpretation work) is being carried out manually and the data created by manual exercise is used for digitization. <b>CSSO instructed that all manual exercises for map preparation should be stopped strictly and all such work should be done onscreen using GIS only, so that the plenty of time could be saved to speed up the running projects and the duplication of</b></p>	<p><b>Ahmadabad:</b> The digitization work in respect to DSS of Taluka- Kalavad has been done on screen with the help of Arc GIS techniques using LISS -IV data of 1:10000 scale. <b>Bangalore:</b> Following the instructions as mentioned in action point. <b>Hyderabad:</b> Manual exercise for map preparation has been stopped and maps are being prepared onscreen. <b>Kolkata:</b> Action has already been taken. <b>Nagpur:</b> All New reports are being processed digitally on computer but the old pending reports for which already half work is done manually are under</p>

S. No.	Action Point	Action Taken
	<p><b>activity in tracing and digitization can be avoided.</b></p> <p>Heads of all the offices have been directed to take up this work under their guidance and supervision and accordingly submit the action taken report to HQ, time to time.</p> <p style="text-align: center;"><b>(Action: HQ &amp; centres)</b></p>	<p>progress. However in future all the reports will be produced digitally.</p> <p><b>Noida:</b> Followed the HQ Guidelines.</p> <p><b>Ranchi:</b> Being followed.</p> <p><b>HQ:</b> In spite of repeated instructions, it has been noticed by the HQs that some of the centres are still adopting the manual practices. It has been viewed seriously by the competent authority. Centres are again directed to follow the instructions strictly from the forthcoming field season.</p>
6.	<p>To overcome the constraint of manpower, it was decided that retired employees/fresh candidates may be appointed to clear the pendency of technical work, on contractual basis against the post vacant at their centres. An appropriate proposal may be sent to HQ office for consideration and approval for this work.</p> <p style="text-align: center;"><b>(Action: HQ &amp; centres)</b></p>	<p><b>Ahmadabad:</b> There is no problem in achieving the physical target (field work). The problem is only in drafting of Soil Survey Reports. We have contacted to capable retired persons for this purpose but they have denied taking the assignment.</p> <p><b>Bangalore:</b> Assistance required from the HQ.</p> <p><b>Hyderabad:</b> Instructions being followed. There is no retired person for Soil Analytical lab &amp; for cartography work Sh. Ramamurthy, JCA has been contacted but he is not able to produce onscreen maps.</p> <p><b>Kolkata:</b> Proposal for engagement of retired employees and for soil sample analysis had already been sent to HQ but no information has been received so far.</p> <p><b>Nagpur:</b> So far there was no short fall of manpower in field section but recently after transfer of two AFO, from Nagpur. The targets will be achieved by present strength.</p> <p><b>Noida:</b> The physical targets allotted to Noida Centre for the year 2015-16, would be achieved timely. Contractual employment not required.</p> <p><b>Ranchi:</b> No such type of retired employee is ready to work.</p> <p><b>HQ:</b> One or two incomplete proposals have been received from the centres in this regards. The concerned has been directed to submit the proposal as fresh considering all rule and regulations time to time issued from DoPT and applies in such cases, to consider the proposals as per rule.</p>
7.	<p>To overcome the shortage of Drivers for field work in some of the centres, it was decided to utilize the services of MTS at their centre, having valid driving license, to use them for field work as well as for day to day work of the office.</p>	<p><b>Ahmadabad:</b> One post of driver is lying vacant.</p> <p><b>Bangalore:</b> Two drivers already joined the duties. The services of MTS will be used in place of driver if required.</p> <p><b>Hyderabad:</b> One MTS is being used for driver duties along with his MTS duty.</p> <p><b>Kolkata:</b> No shortage of drivers.</p>

S. No.	Action Point	Action Taken
	(Action: HQ & centres)	<p><b>Nagpur:</b> No shortage of driver at present. Centre can spare two drivers for field work to other centres.</p> <p><b>Noida:</b> One MTS having valid driving licence and performed duty at HQ.</p> <p><b>Ranchi:</b> One MTS is having driving license but due to shortage of MTS, he has engaged for watch and ward duty.</p> <p><b>HQ:</b> Proposals submitted by the centres in this regard, have been approved and permitted to use the services of MTS, as per rule.</p>
8.	<p>For making a Documentary Film on the activities of SLUSI, a committee was constituted at HQ, who prepared a proposal following the norms of Directorate of Extension of DAC &amp; the Directorate of Audio &amp; Visual publicity, and submitted to the ministry, but it could not be materialized in the last financial year 2014-15. It was desired and decided by the Chief Soil Survey Officer along with the Heads of office of centres that a fresh proposal, may be submitted to the ministry for making a Documentary Film on the activities of SLUSI for benefit of farmers, indicating the types of information of their respective terrain/village for soil health management, soil conservation measures, livelihood security and sustainable use of their land and soil.</p> <p>(Action: HQ &amp; Centres)</p>	<p><b>Bangalore:</b> Proposal in this regard will be submitted in due course.</p> <p><b>Kolkata:</b> Documentary film on the activities of SLUSI should be prepared for the benefit of user dept. as well as farmers also indicating the Soil Health Management, soil-water conservation measures &amp; livelihood security for sustainable agriculture development. –Discussion needed.</p> <p><b>Nagpur:</b> The instructions are followed.</p> <p><b>Noida:</b> Action to be taken by HQ.</p> <p><b>Ranchi:</b> Being followed.</p> <p><b>HQ:</b> A revised proposal was submitted to the ministry, some points have been raised by the ministry for clarifications, so it could not be materialized so far.</p>
9.	<p>It was decided that four short duration courses/training programmes will be conducted during the current year 2015-16 for the officers of user departments and agencies. These programmes have been allotted to Hyderabad, Kolkata, Noida and Ranchi centres. <b>Hyderabad centre</b> will conduct the training programme in the month of October, 2015 for the states of Andhra Pradesh, Telangana &amp; Odisha. <b>Kolkata centre</b> will conduct the training programme in the month of</p>	<p><b>Hyderabad:</b> Training programme have been conducted successfully during 2<sup>nd</sup> to 4<sup>th</sup> of March, 2016.</p> <p><b>Kolkata:</b> Centre has conducted the training on “Soil &amp; Land Resource Database for Integrated Watershed Management Planning” during 20-22<sup>nd</sup> January, 2016. 26 trainees from the Agriculture, Forest and Watershed Development Agency, Govt. of West Bengal, Assam and Meghalaya state participated in the said training programme.</p> <p><b>Noida:</b> Training program was organized on “Soil and Land Resources Data Base for Integrated Watershed Management Planning” during 21<sup>st</sup> – 23<sup>rd</sup>, December,</p>

S. No.	Action Point	Action Taken
	<p>October-November, 2015 for the states of Assam, Sikkim &amp; Arunachal Pradesh. <b>Noida centre</b> will conduct the training programme in the month of September, 2015 for the states of Haryana, Utrakhand, Punjab, Jammu &amp; Kashmir, Himachal Pradesh, Uttar Pradesh, Delhi &amp; Chandigarh and the <b>Ranchi centre</b> will conduct the training programme during the month of November, 2015 for the states of Bihar, Jharkhand &amp; Chhattisgarh.</p> <p><b>(Action: HQ, Hyderabad, Kolkata, Noida &amp; Ranchi)</b></p>	<p>2015 at Central Potato Research Institute Centre, Modipuram, Meerut, Uttar Pradesh - 250110.</p> <p><b>Ranchi:</b> Short course training programme has been already conducted from 28<sup>th</sup> to 30<sup>th</sup> of March at Ranchi.</p> <p><b>HQ:</b> Strict directions had been issued from Hq to conduct the assigned user training programme. This year the achievement have been made in full.</p>
10.	<p>The audit paras have been found in various matters at centres &amp; HQ office. It was advised that centre head should pay proper attention to ensure that the matters should not be repeated in procedure during current financial year to avoid the possible audit paras. It was also decided that the audit paras may be dropped, subject to the next audit inspection in respective offices, needs too, the attention of office heads to get it clear.</p> <p><b>(Action: HQ &amp; Centres)</b></p>	<p><b>Ahmadabad:</b> Audit reply has been given and dropping of Audit para's is under process.</p> <p><b>Bangalore:</b> Reply of audit para have already been submitted to the respective audit departments.</p> <p><b>Hyderabad:</b> Audit reports have been received, reply of the same under process.</p> <p><b>Kolkata:</b> Advised is being followed.</p> <p><b>Nagpur:</b> Audit reply has been given and dropping of Audit para's is under process.</p> <p><b>Noida:</b> Action to be taken and audit paras has been dropped.</p> <p><b>Ranchi:</b> Being followed.</p> <p><b>HQ:</b> Appropriate action has been taken up at HQ office. Ex-post facto sanctions have been granted for removal the audit paras at centres, and instructed to take the prior approval in such cases to avoid the audit paras in future.</p>
11.	<p>To enhance the Digital Data generation at centres, <b>it was decided to upgrade the GIS Lab established at centres by purchasing nine numbers of new Arc view (Arc GIS) licenses. These licenses shall be distributed one each at Bangalore, Kolkata &amp; Nagpur centres and two each at Ahmadabad, Hyderabad, and Ranchi centres for carrying out on screen cartographic work, soil mapping work, map composition and the generation of Digital Soil Database etc.</b> To install the purchased licenses, nine, high end</p>	<p><b>Ahmadabad:</b> There is only one license available is Arc GIS and one is upgraded ERDAS image, which is not sufficient to expedite the GIS work, it means need more license of GIS for proper work.</p> <p><b>Bangalore:</b> Yet to receive from HQ.</p> <p><b>Kolkata:</b> To upgrade the GIS lab, a proposal regarding the Hardware &amp; software has already been sent to HQ.</p> <p><b>Nagpur:</b> The requirement for work station, Scanners and Plotter is already submitted to HQ.</p> <p><b>Noida:</b> Action to be taken by HQ.</p> <p><b>Ranchi:</b> Being followed.</p> <p><b>HQ:</b> The proposals for procurement of high end computers to use for softwares have been concurred</p>

S. No.	Action Point	Action Taken
	<p>Desktop PCs will also be required.</p> <p>(Action: HQ &amp; Centres)</p>	<p>by IFD but could not be delivered before 31st March due to some technical reason. The same will be delivered shortly to all the centres. This year the proposal of software licenses have to take up and shall be submitted to the ministry.</p>
12.	<p>During technical discussion, it was raised by the Head of offices that they are facing acute problem of scanners, as no A0 size scanner is in working condition at their centres. They are getting done their scanning jobs in open market on higher price and still lot of scanning work is pending like scanning of base maps, cadastral maps, drainage maps etc. for soil mapping and also for development of state wise micro watershed atlas. In last financial year, proposals for purchasing of four scanners, one each for Remote Sensing Cell, Ahmedabad, Hyderabad &amp; Ranchi centres have been submitted to the ministry, but due to lapse of the time of DGS&amp;D rate contract during the process, it could not be materialized. Now three more requests from Nagpur, Kolkata &amp; Bangalore centres, have been received by the HQ office. They have also told that the scanners available at their centres are not working and the cost of repairing is very high with very less longevity of the machine. <b>It is to mention that every scanner available at centres, is more than seven years old. So, it has been decided to resubmit the revised proposal for purchasing seven A0 size scanners as per new DGS&amp;D rate contract, as early as possible.</b></p> <p>(Action: HQ &amp; Centres)</p>	<p><b>Ahmadabad:</b> One plotter cum scanner of A0 size is received from the HQ.</p> <p><b>Bangalore:</b> Received scanner and printer of 36” purchased by HQ. The same has been installed and operational now.</p> <p><b>Hyderabad:</b> The scanner has been received through Reprographics India, Hyderabad.</p> <p><b>Kolkata:</b> Scanner cum printer has been received.</p> <p><b>Nagpur:</b> The requirement for work station, Scanners and Plotter is already submitted to HQ.</p> <p><b>Noida:</b> Action to be taken by HQ.</p> <p><b>Ranchi:</b> Being followed.</p> <p><b>HQ:</b> As per the requirement of the centres, the seven numbers of plotter and scanners have been purchased and distributed to all the centres for effective use.</p>

## 2. Review of the Achievements made in respect of Physical and Financial Targets allotted for the year 2015-16 and Application of Remote Sensing and GIS.

### 2.1. Physical Targets and Achievements for the year 2015-16

The centre wise Physical Targets and Achievements in respect of Detailed Soil Survey (DSS) and Soil Resource Mapping (SRM) are furnished below.

(Area in lakh ha)

Centre	Type of Survey	Target	Achievement	Remarks
Ahmadabad	DSS	1.60	<b>1.63</b>	Part of Taluka Lalpur and part of Taluka Kalavad, district Jamnagar, GUJRAT under RADP.
	SRM	0.11	<b>0.11</b>	Daman & Diu Districts (union territory )
Bangalore	DSS	0.90	<b>0.98</b>	Tunga Bhadra Catchment, KARNATAKA
	SRM	2.35 2.50	<b>2.34</b> <b>2.56</b>	Kozhikode and Kollam districts of KERALA under consultancy project of <i>Kerala State Land Use Board (KSLUB)</i> .
Hyderabad	DSS	1.30	<b>1.19</b>	Rain fed Area un der TELANGANA
Kolkata	DSS	0.90	<b>0.93</b>	Rain fed Area of Purulia district of WB
Nagpur	DSS	1.30	<b>1.32</b>	Narmada Catchment (MP) & Jayakwadi Catchment (MS)
Noida	DSS	1.50	<b>1.70</b>	Ramganga FPR Catchment, Almora of UK, Rampur & Moradabad of UP
Ranchi	DSS	1.30	<b>1.26</b>	Rain fed Districts of JHARKHAND STATE
<b>Total</b>	<b>DSS</b>	<b>8.80</b>	<b>9.01</b>	<b>(Target achievement 102% )</b>
	<b>SRM</b>	<b>5.01</b>	<b>5.01</b>	<b>(Target achievement 100% )</b>

2.2. Centre-wise expenditure of the Budget allocations for the year 2015-2016 is given in **Annexure-I** and Allocation of Budget Estimate for the year 2016-17 is given in **Annexure-II**.

### 2.3. Application of Remote Sensing and GIS

S. No.	Particulars	Achievement made		Work Status
		Area Description	Nos.	
1	Micro Watershed Atlas	Uttar Pradesh	425 sheets	Completed & Quality checking is <b>under process</b> by RSC & NOIDA
		Dadara and Nagar Haveli		<b>Completed</b> :Delineation and Codification done by Ahmebabad Centre and digitization done by RSC
		Madhya Pradesh		Correction as per WAI-2012 has been completed.
		Haryana	21 districts	Content compilation and preparation (A3 size) for print.
		Uttarakhand	20 sheets	Correction as per WAI-2012 under process.
2	Soil Resource Mapping	Digitization of four districts namely Madhepura, Saharsha, Khagadia and Munger of Bihar		Completed
		Daman and Diu		Digitization and publication done by RSC
		Twelve districts of Uttarakhand		Three reports are submitted and remaining under process.

S. No.	Particulars	Achievement made		Work Status
		Area Description	Nos.	
3	Geo-tag of DSS reports	Preparation of DSS Status Map by geo- referencing of reports.		Out of 1030, 790 nos. of DSS reports completed.
4	Browsing of NRSC data	Detailed Soil Survey		Browsing of NRSC data for all centres

S. No.	Achievement made
5	A training manual on “Procedural Manual on Development of Digital Database” has been prepared
6	Two days in-house training program on Digital Cartography has been organized by RSC from 25 <sup>th</sup> -26 <sup>th</sup> Feb 2016.
7	Publication of Annual report 2014-15 is in final processing stage at Head Quarter.
8	<ul style="list-style-type: none"> <li>• <b>Development of Database and Application</b> The database of RRS, DSS and SRM survey has been developed <b>upto march 2015</b>. Using this database State-wise, catchment-wise, centre-wise, report-wise along with abstracts has been developed using technologies JavaScript, MS-SQL server database HTML, DHTML and NET applications. Map based reports also prepared, for an example click on India Map; states will appear, by click on the State for the desired survey, the list of reports will appear. Thereafter by click on report, the user will get abstract. The reports with abstracts information of RRS, DSS and SRM has been uploaded on the SLUSI website up to march 2015. Preparation of RRS, DSS &amp; SRM survey status map. Database management, query and preparation of DSS reports as a spatial reference (Geo-tag of DSS reports)</li> <li>• <b>Updated SLUSI Website :</b> The content of SLUSI website update from time to time such as RTI, citizen charter, contact information, training details, seniority list, recurrent rules, survey status, annual reports &amp; meetings, vacancy and Tenders etc.,</li> <li>• <b>Biometric attendance system.</b> Created a domain for SLUSI namely <a href="http://slusi.attendacne.gov.in">http://slusi.attendacne.gov.in</a> .</li> </ul>

## 2.4. Short course/training programmes for the year 2015-16

### 2.4.1. “Soil & Land Resource Database for Integrated Watershed Management”

S. No.	Centre	For the states	Status
1.	Hydrabad	Andhra Pradesh, Telangana & Odisha	Short course/training programme have been conducted successfully during 2 <sup>nd</sup> to 4 <sup>th</sup> of March, 2016.
2.	Kolkata	Assam, Sikkim & Arunachal Pradesh	Short course/training programme on “Soil & Land Resource Database for Integrated Watershed Management Planning” during 20-22 <sup>nd</sup> January, 2016. 26 trainees from the Agriculture, Forest and Watershed Development Agency, Govt. of West Bengal, Assam and Meghalaya state participated in the said training programme.
3.	Noida	Haryana, Uttrakhand, Punjab, J&K, H.P., U.P., Delhi & Chandigarh	Training program was organized on “Soil and Land Resources Data Base for Integrated Watershed Management Planning” during 21 <sup>st</sup> – 23 <sup>rd</sup> , December, 2015 at Central Potato Research Institute Centre, Modipuram, Meerut, U.P.
4.	Ranchi	Bihar, Jharkhand & Chhatisgarh	Short course training programme have been conducted successfully during 28 <sup>th</sup> to 30 <sup>th</sup> of March, 2016.

#### 2.4.2. "Geoinformatics for Natural Resources Management"

S. No.	Centre	For the officials	Status
5.	Nagpur	Orientation for newly appointed AFO	Short course/training programme have been conducted successfully during 4 <sup>th</sup> to 5 <sup>th</sup> of November, 2015.
6.	Noida	For Cartographic officials	Two days short course training on "Geoinformatics for Digital Cartography" during 25 <sup>th</sup> and 26 <sup>th</sup> February, 2016.

#### 2.4.3 "Soil Survey and Mapping Using Geoinformatics"

S. No.	Centre	For the Faculty/Students	Status
7.	Bangalore	For PG/PhD student of Soil Science No of Student-35	Two days short course training organized at Kelabpaji College of Agriculture Engineering & Technology (KCAET), Tavanur, Kerala Agriculture University, Malappuram, Kerala during 25 <sup>th</sup> and 26 <sup>th</sup> November 2015.
8.	Kolkata	For PG(M.Sc) student of Soil Science No of Student-38	Two days short course training organized for the students of Calcutta University, Kolkata, West Bengal on dated 14 <sup>th</sup> January, 2016 and 9 <sup>th</sup> February, 2016.

### 3. Review of the pending soil survey reports, reports issued during the year 2015-16 and draft reports submitted to HQ for approval.

#### 3.1. Review of Pending Soil Survey Reports & reports issued during the year 2015-16:

Centre	RRS		DSS		SRM		Total			
	Pending	Issued	Pending	Issued	Pending	Issued	Pending on 01.04.15	Issued up to 31.03.16	Pending as on 31.03.16	Pending as on 01.04.16
RSC (HQ)	-	-	-	-	13	-	13	-	13	13
Ahmadabad	1	-	17	3	20	1*	38	3+1*	34	40
Bangalore	-	-	11	1	10	7	21	8	13	17
Hyderabad	5	-	11	1	6	-	22	1	21	25
Kolkata	16	1	6	5	57	10	79	16	63	65
Nagpur	4	3	11	8	2	1	17	12	5	7
Noida	18	2	11	3	-	-	29	5	24	28
Ranchi	3	1	8	3	10	-	21	4	17	20
<b>Total</b>	<b>47</b>	<b>7</b>	<b>75</b>	<b>24</b>	<b>118</b>	<b>19</b>	<b>240</b>	<b>50</b>	<b>190</b>	<b>228</b>

\* Digitization work and report published by RSC (HQ).

List of Pending Soil Survey Reports (*as on 01.04.2016*) is given in **Annexure-III**.



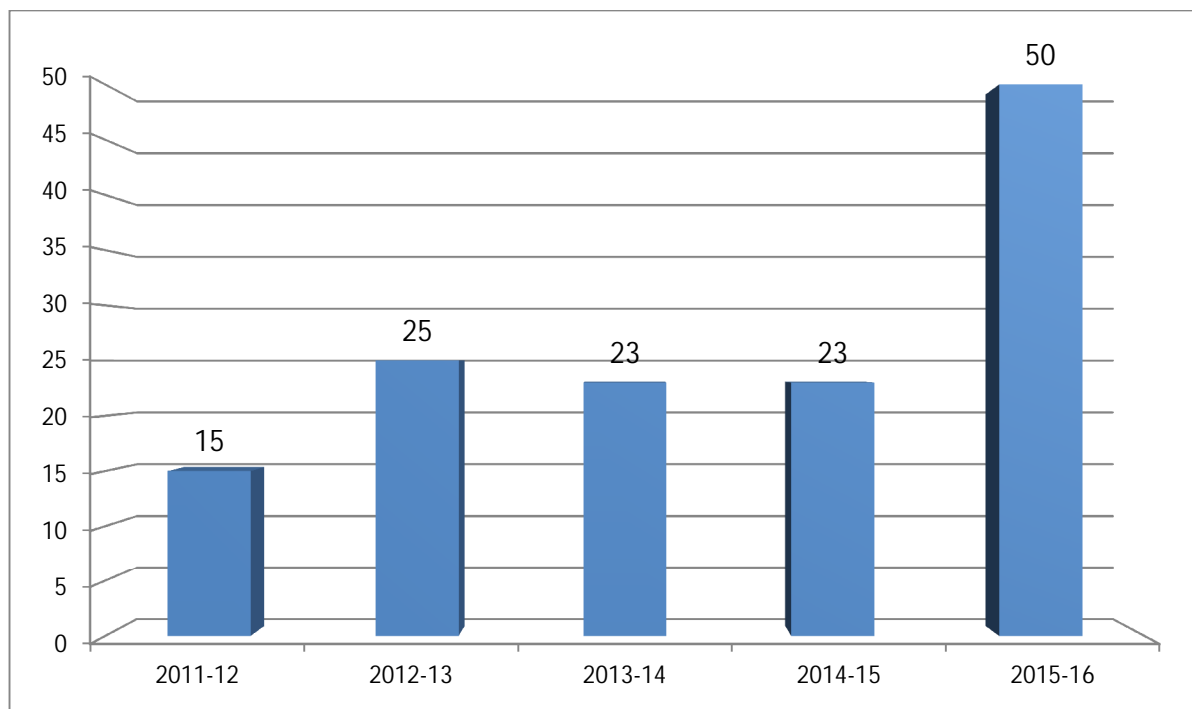
**3.2. Draft report submitted to HQ for approval and review of status of reports assured to be cleared, up to March, 2016.**

Centre	RRS		DSS		SRM		Total assured to be cleared	Draft received up to 31.03.16
	Total	Assured to be cleared	Total	Assured to be cleared	Total	Assured to be cleared		
RSC, Noida	-	-	-	-	13	13 (Up to 31.07.15)	13	3
Ahmadabad	-	-	14	5	20	7 (Up to 31.08.15)	12	6
Bangalore	-	-	10	6 (3 up to 30.06.15)	11	9 (2 up to 30.09.15)	15	3
Hyderabad	4	4 (Up to 31.08.15)	9	3	6	4	11	2
Kolkata	15	2	6	6	53	17	25	12
Nagpur	4	3	8	6	2	2	11	6
Noida	18	3	9	6	-	-	9	6
Ranchi	4	3	6	6	10	7	16	3
<b>Total</b>	<b>45</b>	<b>15</b>	<b>62</b>	<b>38</b>	<b>115</b>	<b>59</b>	<b>112</b>	<b>41</b>

*Status of Draft report edited at HQ during Year 2015-16*

Centre	RRS		DSS		SRM		Total Report edited	Number Allotted	Draft report at HQ as on 31.03.16
	Edited	Number Allotted	Edited	Number Allotted	Edited	Number Allotted			
RSC (HQ)	-	-	-	-	-	-	0	0	3
Ahmadabad	0	0	7	5	2	1	9	6	0
Bangalore	0	0	2	1	4	3	6	4	0
Hyderabad	1	0	2	1	0	0	3	1	0
Kolkata	1	1	2	2	14	14	17	17	1
Nagpur	3	3	10	10	0	0	13	13	0
Noida	3	3	6	1	0	0	9	4	1
Ranchi	1	1	4	4	0	0	5	5	1
<b>Total</b>	<b>9</b>	<b>8</b>	<b>33</b>	<b>24</b>	<b>20</b>	<b>18</b>	<b>62</b>	<b>50</b>	<b>6</b>

**3.3. Status of Reports Published:** The following diagram showing the status of reports published by SLUSI in the last five years.



**4. Review of soil samples analysis, target and status & the analysis of samples collected for soil fertility during the year 2015-16.**

(As per MPR)

S. No.	Centre	No. of Soil samples collected and analyzed of different survey				No. of Soil samples collected and analyzed for soil fertility mapping			
		Pending as on 01.04.2015	Collected	Analyzed up to 31.03.15	Pending as on 01.04.2016	Pending as on 01.04.2015	Collected	Analyzed up to 31.03.15	Pending as on 01.04.2016
1.	Ahmadabad	317	2001	443	*352	322	891	0	1213
2.	Bangalore	2095	641	1144	1592	648	864	347	1165
3.	Hyderabad	320	1459	412	1367	144	513	48	609
4.	Kolkata	2650	308	719	#2141	260	0	0	260
5.	Nagpur	889	267	266	890	0	855	494	361
6.	Noida	232	529	570	191	1726	2282	250	3758
7.	Ranchi	687	874	601	960	0	161	0	161
	<b>Total</b>	<b>7190</b>	<b>6079</b>	<b>4155</b>	<b>7493</b>	<b>3100</b>	<b>5566</b>	<b>1139</b>	<b>7527</b>

**5. Review of the progress for the preparation of State wise Micro watershed Atlas to prepare seamless hydrological map of the country.**

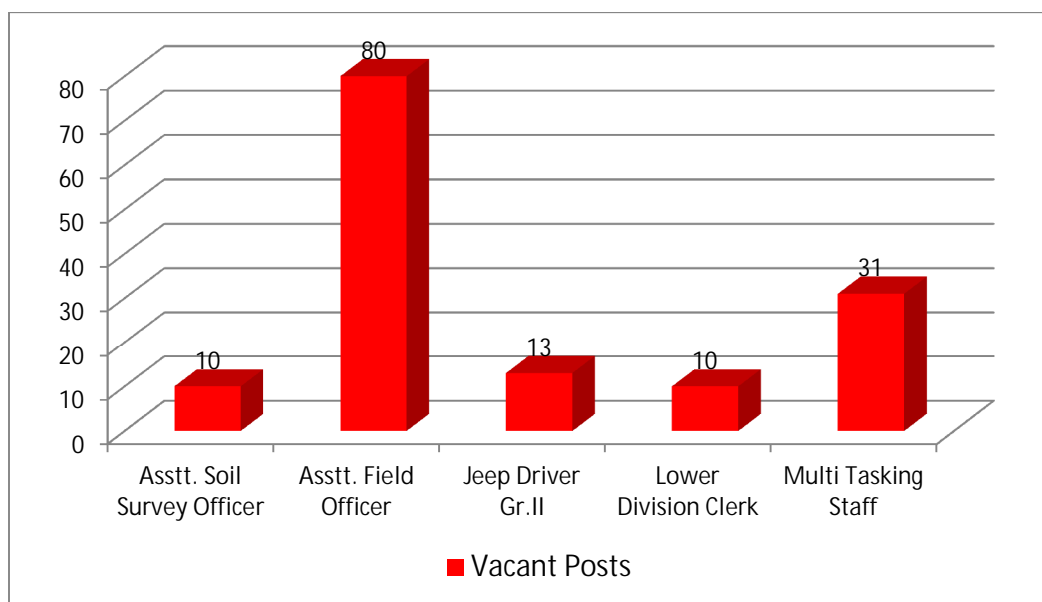
S. No.	Centre	State /UT	Status as on 05.05.2015			Date of Completion	Status as on 31.03.16	
			Codification	Digitization			Del. & Codification	Drainage
				Drainage	HU			
1.	Ahmadabad	Lakshadweep	-	-	-	30.09.15	Completed	Completed
2.	Hyderabad	Orissa	Remaining (45%)	-	-	31.12.15	Under progress	Under progress
3.	Kolkata	Assam	Remaining 45%	Remaining 65%	Remaining 65%	31.08.15	Completed	Completed
4.	Noida	Jammu & Kashmir	Remaining 86%	-	Completed	30.11.15	Completed	Completed
		Uttar Pradesh	Completed	100%	-	31.05.15	Completed	Completed
5.	Nagpur	Uttar Pradesh	-	168 Sheets	-	-	-	Completed
6	RS Cell	Uttar Pradesh	-	253 Sheets	-	31.05.15	-	Completed

**6. Review of the staff position, field parties and the vehicles.**

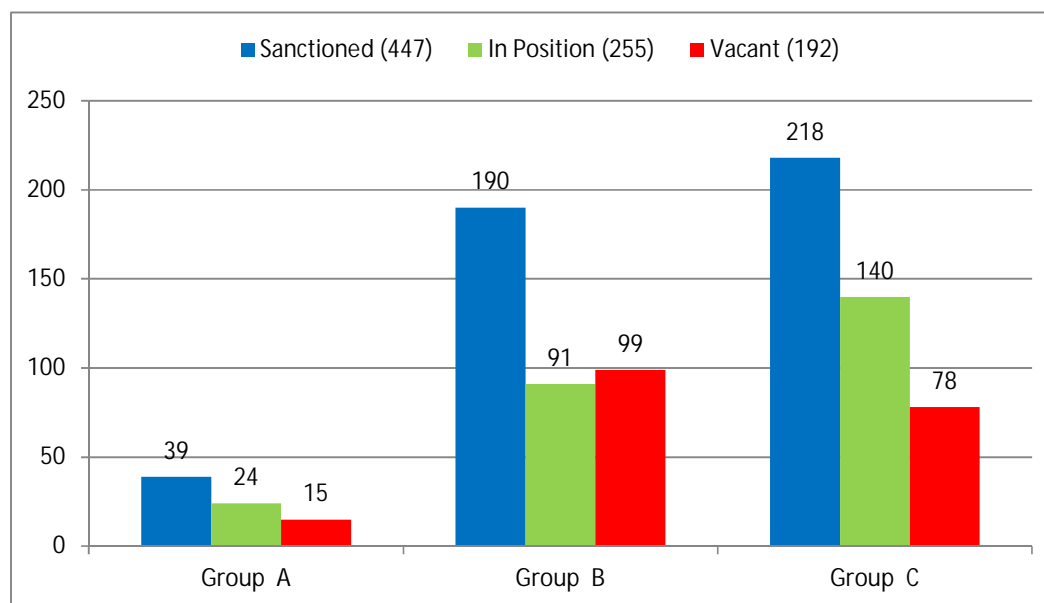
**6.1. Staff Position:** The centre wise staff position in respect of various groups as shown in Annexure-IV and the overall position is summarized below.

Group	Sanctioned	In Position	Vacant
Group A	39	24	15 (39%)
Group B	190	91	99 (52%)
Group C	218	140	78 (36%)
<b>Total</b>	<b>447</b>	<b>255</b>	<b>192 (43%)</b>

**Status of vacant posts which are in double digit**



### Overall Status of staff position as on 31.03.2016



### 6.2. Review of Field Parties and Vehicles:

The centre-wise position of field parties, vehicles and drivers

S. No.	Centre	Field Party Position			Vehicle Position				No. of Drivers	
		Sanctioned (FO & AFO)	In Position (FO & AFO)	Effective for Field Work	Total	Fit for Work	Condemned & Disposed-off	To be Condemned	Sanctioned	In Position
1.	HQ	7	2	-	4	4	-	-	4	3
2.	Ahmedabad	19	12	6	7	5	-	2	7	6
3.	Bangalore	22	11	9	8	7	-	1	9	3
4.	Hyderabad	18	10	4	6	5	-	1	6	3
5.	Kolkata	22	8	-	9	9	-	-	9	9
6.	Nagpur	22	8	3	7+1*	7	-	1	12	6
7.	Noida	22	11	4	NA	5	-	-	9	2
8.	Ranchi	18	8	8	8	6	-	2	5	4
<b>Total</b>		<b>150</b>	<b>70</b>						<b>61</b>	<b>36</b>

\*One Bus;

### 7. Formulation of the action plan for the year 2016-17.

- Physical & Financial Targets of HQ/Centres
- Application of RS & GIS, Remote Sensing Cell, Noida
- Microwatershed Atlas of remaining states
- Short duration course/training programmes *and*
- Clearance of Pendency of Soil Survey Reports

**A. Physical & Financial Targets of HQ**

a. **Physical Targets for the year 2016-17:** Centre wise Physical Target in respect of Detailed Soil Survey (DSS) and Soil Resources Mapping (SRM):

(Area in lakh ha)

Centre	Type of Survey	Target	Remarks
Ahmadabad	DSS	1.50	Taluka Dharol and Kalwad (part), Dist- Jamnagar, Gujarat
Bangalore	DSS	1.50	45 MWSs of 4C1 Catchment-Karnataka state
Hyderabad	DSS	1.30	4D6B7, 4E5A5 watersheds of Nagarjunsagar Catchment, Rangareddy and Mehboobnagar District, Telangana State.
Kolkata	DSS	1.20	Manbazar Block – I, Purulia block-I & II and Para block, Dist- Purulia (WB)
Nagpur	DSS	1.50	Narmada Catchment (Madhya Pradesh) & Jayakwadi Catchment (Maharashtra)
Noida	DSS	1.70	a) Moradabad (Utter Pradesh), Ramganga Catchment, b) Jhansi (Utter Pradesh), Betwa Catchment.
Ranchi	DSS	1.30	Ranchi (part) & Khunti rainfed Districts of Jharkhand state
<b>Total</b>	<b>DSS</b>	<b>10.00</b>	
	<b>SRM</b>	<b>60.52</b>	<i>Outsourcing</i> in respect of nine districts of Bihar (23.60 lakh ha) through <i>Odisha Space Application Centre (ORSAC), Bhubaneswar</i> and Ten districts of Jammu & Kashmir (36.92 lakh ha) to <i>Department of Ecology Environment and Remote Sensing (DEERS), Jammu.</i>

b. **Financial Targets for the year 2016-17:** The Budget allocation for the year 2016-17 is given in **Annexure-II**.

**B. Application of Remote Sensing and GIS, Remote Sensing Cell, Noida:**

Sr. No.	Description*	Remarks
1	Uttarakhand MWA correction and Digitization of Drainage as per new Watershed Atlas	90 Toposheets
2	Preparations of platform free Microwatershed Atlas of Himachal Pradesh and Jharkhand by in-house i.e Remote sensing cell. Earlier this project was given to NIC under paid project. The NIC had prepared 13 States of platform free micro watershed atlas and uploaded on the website of SLUSI.	Two states
3	Preparation of DSS Status Map (Geo-tag of DSS reports)	530 reports.
4	Preparation of Database and reports of DSS & RRS for the year 2016-17	

*\*Above work plan is subject to the availability of manpower, since at present in the RSC only two employees exists viz. one Senior cartographic assistant and one junior cartographic assistant.*

**C. Preparation of State wise Microwatershed Atlas of remaining state.**

Odisha state.

**D. Short duration course/training programmes.**

Each centre has to conduct the users training program at different places, during 2016-17.

**8. Finalization of work plan to be presented by Heads of the Centres to finish pending work i.e. scanning and digitization of old maps and soil survey reports.**

It was decided in the meeting that cartography staff of all the centres should be deployed to scanning & digitization of old DSS/RRS maps and an action Point No. 6 was emerged. The status of Remote Sensing Cell (Noida) is given below:

Centre	Total DSS Reports	*Digitization done		Pending (To be done by the respective Centres)
		Under NIC project up to the Year 2010 (PAN/SGS)	by Centres	
Ahmedabad	60	0	0	60
Bangalore	178	112	3	63
Hyderabad	51	49	0	2
Kolkata	201	66	9	126
Nagpur	259	163	3	93
NOIDA	232	64	2	166
Ranchi	49	19	0	30
<b>Total</b>	<b>1030</b>	<b>473</b>	<b>17</b>	<b>540</b>

*\*Digitized 473 DSS reports without GIS reference under NIC project. For making geo-reference we have to use various methods such as special adjustment, rubber sheeting etc., for that we need technical manpower so that these 473 maps will be geo-referenced. Otherwise digitization of these maps has no value. Further out 473, only near about 150 reports non-spatial data available, which is prepared under NIC project.*

**9. Finalization of schedule and work plan to be presented by Heads of the Centres for completing the analysis of pending soil samples.**

Centre	Pending Soil samples of different survey as on 01.04.2016	Pending Soil samples for fertility mapping as on 01.04.2016	Work plan
Ahmadabad	352	1213	Target for analysis of soil samples should not be less than 80-100 samples per month.
Bangalore	1592	1165	Target for analysis of soil samples should not be less than 80-100 samples per month.
Hyderabad	1367	609	Two AFOs to be involved to take up Soil Analysis work @ 50 samples per person per month.
Kolkata	2239	260	@ 100 samples per month.
Nagpur	890	361	Analysis of the soil samples of fertility map stopped as per the instructions. There is no pending of analysis of soil sample required for soil survey reports except for the current seasons, which will be taken up as regular work.
Noida	191	3758	All collected soil samples in 2015-16 will be analysis within 2016-17.
Ranchi	960	161	Target for analysis of soil samples should not be less than 80-100 samples per month.
<b>Total</b>	<b>7591</b>	<b>7527</b>	

**10. Action taken on the directions of H.Q. for bringing new projects from other departments/agencies.**

Centre	New Projects
Ahmadabad	<ul style="list-style-type: none"> <li>• The Principal Chief Conservator of Forest Gujarat.</li> <li>• The Managing Director of Gujarat Land Development Corporation.</li> <li>• The Directorate of Agriculture, Gujarat in respect to 'Soil Health Card' of Gujarat state jointly but till date we did not get any response about the combined project.</li> </ul>
Bangalore	<ul style="list-style-type: none"> <li>• Shri A. Nizamuddi, Landuse Commissioner, Kerala State Landuse Board - Under LRIS programme, district wise SRM going to be continued for the rest of the districts.</li> <li>• Dr. Athira P., Ass. Professor, NIT Kozhikode - Data of 5A2B subcatchment of Bharathapuzha Basin is needed. The required funds will be sent to head quarters at the earliest.</li> <li>• Dr. Hegde, Director, NBSS &amp; LUP Bangaluru - Old Surveyed area under DSS in Karnataka (Either in soft /hard copy of the reports along with maps demanded). Discussion in progress.</li> </ul>
Hyderabad	<ul style="list-style-type: none"> <li>• Action initiated with preliminary visits to TRAC, APSAC, IWMP and NIRD, Hyderabad.</li> <li>• Also had discussion for signing of MoU with Director/Register, NIPHM, GOI, Hyderabad and Dean Agriculture, PJTSAU, Hyderabad.</li> </ul>
Kolkata	<ul style="list-style-type: none"> <li>• Contacted different state officials like as Dir. Agri, Joint dir. Agri, CSSO, West Bengal; PCCF (RMD), West Bengal, CEO, West Bengal Watershed Development Agency. Brochure contained database generated by SLUSI has already been sent to state officers and tried to convince for bringing new projects.</li> </ul>
Nagpur	<ul style="list-style-type: none"> <li>• The letter was written to the Director of agriculture of Maharashtra, MP and Chhattisgarh for new project work.</li> <li>• The CEO of watershed Management Agency Chhattisgarh wanted the DSS Maps of 1:10,000 scales of selected blocks for IWMP.</li> <li>• The cost is informed to them and further communication is under progress.</li> <li>• The project can be materialized if higher Authorities initiated the process.</li> <li>• Full Chhattisgarh map on 1:10,000 scales can be produced by the combined efforts of Nagpur, Ranchi and Kolkata Centre within 2-3 Years.</li> </ul>
Noida	<ul style="list-style-type: none"> <li>• Will be in contact with state government agriculture departments/agencies for new projects as per directions of HQ.</li> </ul>
Ranchi	<ul style="list-style-type: none"> <li>• Instructions being followed (contacted made with various departments and agencies).</li> </ul>

**11. Publications:**

Centre	Reports published	Papers published in journals/proceeding
HQ	Annual Report for the year 2013-14	<ul style="list-style-type: none"> <li>• <i>Velamala Ranga Rao., 2015. "Citizen Relationship and Grievance Management System (CiR&amp;GMS) through Multi-Channel Access for e-Government Services: A Case from India", International Journal of E-Services and Mobile Applications, Volume 7, issue 2, pp 43-67; doi:10.4018/ijesma. 2015040103, April-June 2015 by IGI Global.</i></li> <li>• <i>Soil Suitability Evaluation for Mango, Citrus and Guava in Hosangabad district of Madhya Pradesh Using Geospatial Technology in "Journal of Soil and Water Conservation" Vol. 14, No. 3, July-Sept-2015, N S Gahlod, V S Arya, Suresh Kumar and Ravi</i></li> </ul>

Centre	Reports published	Papers published in journals/proceeding
Ahmadabad	4	Nil
Bangalore	8	<p><b>Two papers had been published in the KSLUB (Kerala State Land Use Board) National Seminar souvenir at Thiruvananthapuram.</b></p> <ul style="list-style-type: none"> <li>• <i>Land Resource Inventory for evaluation of Land Capability and Land Use Planning in Palakkad of Kerala State using Remote Sensing and GIS techniques</i> A. W. M. Joseph, R. L. Meena and Arya V. S.</li> <li>• <i>Assessment of Soil Physico-chemical Properties for Scientific Land use planning in Palakkad District of Kerala State using Remote Sensing and GIS techniques.</i> Dhale S. A., Meena R. L. and Arya V. S.</li> </ul>
Hyderabad	1	Nil
Kolkata	16	<ul style="list-style-type: none"> <li>• One in National Conference on Application of Clay Science in Agriculture, Environment and Industry held at Kolkata.</li> <li>• Another in National Seminar on Soil Health Management and Food Security: Role of Soil Science, Research and Education held at Kolkata.</li> </ul>
Nagpur	12	Nil
Noida	5	Nil
Ranchi	4	Nil

## 12. Review of the pending Audit Paras, Court/CAT/RTI cases and other administrative matters.

### 12.1. Audit Paras

Centre	Cases
HQ	<p><b>External Audit</b> was conducted for the year 2008-09 and 2010-11 from 26-01-2012 to 30-01-2012. Report has been received and reply has also been submitted. The audit has replied that para <i>may be treated as settled</i> subject to verification at the time of next audit.</p> <p><b>Internal audit</b> was conducted for the year 2008 to 2012 from 06-05-2014 to 12-05-2014. Audit report has been received and the action is being taken accordingly.</p>
Ahmedabad	Audit report has been received on 23.02.2015 vide letter No. Agri/IAW/DLI/SLUS/Ahmedabad/14-15/4258 dated 05.02.2015. The reply of audit paras has been submitted to IAW (HQ), New Delhi vide letter No. 1.13/Acctt/SLU/AHD/2013/212 dated 21.04.2015. All paras of previous audit for the period 2009-12 have been cleared.
Bangalore	<p><b>Pending audit paras and replies to internal audit for the period from 01.04.2010 to 31.03.2012.</b></p> <p><i>Para No. 11:</i> Implementation of Detailed Soil Survey (DSS), Rapid Reconnaissance Survey (RRS) &amp; Soil Resource Management (SRM) Surveys needs renaissance - The physical targets, type of survey, areas to be surveyed, duration of survey, etc. are discussed during the Annual Technical Meeting of Heads of Offices in the month of February/March every year. The priority areas of survey are finalized in the meeting. Therefore the para may be dropped</p> <p><i>Para No. 15:</i> Disposal of unserviceable articles - Necessary action is being initiated to obtain the approval of the Competent Authority, to dispose-off the unserviceable and obsolete store articles. As soon as the approval is received from the Competent Authority, action will be taken to dispose off the unserviceable articles.</p> <p><i>Para No. 16:</i> Revitalization requires for various Recruitment Rules - Correspondence is being done with our Competent Authority. This will be intimated to you after</p>



Centre	Cases
	<p>receipt of the same.</p> <p><b>Pending audit paras and replies to internal audit for the period from 01.04.2012 to 31.03.2014.</b></p> <p><i>Para No. 1:</i> Revenues realised not routed and accounted through PAO, Agriculture, Chennai - All the projects are allotted, approved and rates quoted by Competent Authority i.e., Chief Soil Survey officer, New Delhi. However all the accounts of receipts and payments are maintained by Head Quarters and routed/remitted to PAO Extension, New Delhi? Therefore requested to drop the Para at your end.</p> <p><i>Para No. 5:</i> Disposal of Trailer MYB-4459 has no RC Book - The physical verification has been done. The trailer will be disposed off and will be intimated to the audit.</p> <p><i>Para No. 9:</i> Annual Physical Verification of Dead Stock Articles - Needful action is being taken.</p>
Hyderabad	<p><b><u>AG Audit/Inspection report/objections (05.10.2015 to 09.10.2015)</u></b></p> <ol style="list-style-type: none"> <li>1. Irregular withdrawal of self cheques for the Rs. 4160082/-. The details of the entries in the cash book for the drawls and acquaintances for its disbursements were not furnished with the orders of the competent authority to draw and disburse them in cash – <b>payment was made through cash in place of Cheques, noted for future compliance</b></li> <li>2. Non monitoring of the implementation of contract entered into with Manpower Supply Agency- <b>Details of EPF, ESI etc of security personal obtained to reply to audit.</b></li> <li>3. Irregularities in the payment of bills- The mode of payment adopted without acknowledge-ment/receipt from the recipient of the claims along with the details of disbursement to the entitled claimaint- <b>acknowledgement/receipt is to be obtained from concerned officials</b></li> <li>4. <b>Irregular payment of LTC</b> on waiting list tickets against officials – Sh. P N Bhoyar, Steno- amount of Rs 17205 recovered and Sh. Y. Hanumantha Rao, Driver – <b>amount recovered from Sh. P N Bhoyar, Steno and recovery of Rs 12375/- from Sh. Y. Hanumantha Rao, Driver to be done.</b></li> <li>5. Irregular sanction of wages over and above the financial powers- <b>bills were submitted for higher amounts by field parties wrt the delegation of powers of head of office.</b></li> <li>6. The officials going on tour for field survey were claiming food bills and lodge rent for their stay on field duties and also payment of Rs 350 per month towards purchase of kerosene. <b>The party claim lodge rent for their stay till they get rent free accommodation. Food bill is furnished against DA. In rent free accommodation in field kerosene used to non availability of electricity on some occassions.</b></li> <li>7. Omissions in service books- <b>Necessary action have been taken.</b></li> <li>8. Certain vehicles (Vehicle No. WB 9754) kept idle – <b>for undertaking the repairs</b></li> <li>9. Unserviceable articles and machinery lying idle – <b>Action initiated for auction.</b></li> </ol> <p><b><u>Internal audit report/findings ( 17.08.2015 to 21.08.2015)</u></b></p> <ol style="list-style-type: none"> <li>1. MPR for the year 2014-5 is not tallying with the target fixed by the Headquarter/Ministry – <b>MPR rectified with effect from September 2015 onwards and necessary action initiated as per HQ instructions time to time.</b></li> <li>2. <b>RADP- Rainfed area to be taken for survey – Action taken</b></li> <li>3. Non disposal of unserviceable articles – <b>Action to be taken</b></li> <li>4. Sh. Shyam Manohar Nirmal, MTS appointed on 15-09-2014 has been resigned on 23.04.2015 by sending the fax without joining the duties and also had been granted excess leave. <b>To recover 10 days EL of pay and allowances of Rs 6095/- Action to</b></li> </ol>

Centre	Cases
	<p><b>be taken.</b></p> <p>5. Vehicle no. WB-20-9754 not working since July 2013- and Following deviation noticed in the monetary limit delegated to the Soil Survey Officer, Hyderabad to incur expenditure on vehicle - <b>Action to be taken for sanction of estimate from HQ.</b></p> <p>6. Imposing service charges by SBI (Branch2788) for GOVT Ordinary Transaction is violation of Agreement made between RBI and GOI- <b>An amount of Rs 90/ @ Rs 5 in RTGS deposited to Govt. account.</b></p> <p>7. Splitting of Expenditure to avoid the sanction of the Higher Authority/<b>Violation of Delegation of Financial Power – proposal Expost fato sanction will be sent to CSSO</b></p> <p>8. New Pension Scheme contribution not remitted in the individual’s account, matter to be taken up with the Bank Authorities and NSDL to confirm/credit for the month of April 2014 – <b>Department statement to be verified.</b></p> <p>9. Correct tax deduction in Form-16 to be issued and to be done as per standard guidelines – <b>Action to be taken to review.</b></p> <p>10. Shri. N Subramaniam, Chowkidar – MISSING NOT TRACEABLE and non settlement of payment of his dues to his family – <b>Nobody is coming forward to claims dues</b></p> <p>11. Short payment of Family planning Allowance to the employees from 01.09.2008 – <b>Dues to be worked out and dispersed.</b></p> <p>12. Maintainance of Service book-not maintained as per rules – <b>Photographs, Service book will be shown and signature will be obtained.</b></p> <p>13. Less payment of Pay and allowances wef 24.12.2010 in case of Sh KMK Murthy, AFO, pay to be revised- <b>Due and Drawn statement will be made and amount will be disbursed.</b></p> <p>14. Incorrect increment granted to Sh. N Malliah, AFO on 01.07.2011 excess amount paid to be recovered(para 11 of 2011-14) – <b>Excess payment will be recovered.</b></p> <p>15. Excess payment of Pay and Allowances of Sh. K. M. Krishnamurthy, AFO, N. Mallaiah, AFO, and Sh. S. T. Selukar, AFO wrt grant of ACP and MACP (para 12 of 2011-14) – <b>Case will be reviewed and recovery will be made.</b></p>
Kolkata	Internal Audit was conducted from 27-31 <sup>st</sup> July, 2015. External Audit was held from 11-18 <sup>th</sup> January, 2016. But this office has yet to receive the report of both the audit.
Nagpur	Nil
Noida	Reply of last internal Audit report is being prepared.
Ranchi	Nil

## 12.2. Court/CAT Cases

Centre	Cases
HQ	• Nil
Ahmedabad	• Dr. Shekhar Sarbhai (Technical Officer) Vs Union of India and Others – O.A./120/00380/2014, for promotion to the post of Asstt. Soil Chemist- regarding. Counter reply has been filed by Shri Joy Mathew, Central Government standing Counsel on 22.12.2014. Subsequently, a rejoinder was submitted by Dr. Shekhar Sarbhai through Shri B. A. Vaishnav, advocate for the applicant on 05.02.2015. Sur-rejoinder has been handed over to Ms. Falguni D. Patel, Central Government standing Counsel on 16.06.2015. The next date for hearing is uncertain.
Bangalore	• NA
Hyderabad	• Nil

Centre	Cases
Kolkata	• Nil
Nagpur	• Nil
Noida	<ul style="list-style-type: none"> <li>• Cat case is running regarding TA for NOIDA Staff. Date of hearing is 26/04/2016.</li> <li>• Cat case is running for Smt. Murti Devi. Date of hearing is 03/05/2016.</li> </ul>
Ranchi	<ul style="list-style-type: none"> <li>• Court Case-II- No. W.P. (S) No.2010/WP(S) 455/2010. Shri Vikash Kumar Tirkey, S/o Late Devi Lal, Ex-Khallasi Vs union of India - Court case in the high court of Jharkhand at Ranchi regarding his appointment on compassionate ground. The case is still pending as informed by Advocate.</li> </ul>

### 12.3. RTI cases

Centre	Query Points	Reply
HQ	Nil	
Ahmedabad	Nil	
Bangalore	Nil	
Hyderabad	Nil	
Kolkata	Nil	
Nagpur	Nil	
Noida	Nil	
Ranchi	Nil	

### 12.4. Administrative matters

Centre	Matter
RS Cell	• Nil
Ahmedabad	• Nil
Bangalore	• NA
Hyderabad	<ul style="list-style-type: none"> <li>• There is acute Shortage of staff in the Soil Analytical Lab and Field section to clear the report.</li> <li>• Sanctioning limit towards wages be increased.</li> <li>• Sanctioning limit towards reimbursement of medical claim of Staff to be increased.</li> <li>• Request for two more ArcGIS licence for clearing of pendency of report.</li> </ul>
Kolkata	• Nil
Nagpur	<ul style="list-style-type: none"> <li>• At present there is no ASSO and Soil Chemist in the Centre. Dr. Kanktekar is due for retirement in July 2016. It is very difficult to run the day to day office and monitoring the work of digital Carto Soil-Laboratory, Field review work, DDO work without the officers. Hence it is request to give some officers for smooth running of the Centre.</li> <li>• Requirements of Guards for office as the number MTS are reduced. One MTS will retire on May, 2016. Out of 14 posts at present only nine are filled up and 5 posts are vacant which may be filled up at the earliest otherwise watchman for watch and ward duties will have to be hired.</li> <li>• Hence, the necessary action may be taken to fill up these posts as early as possible for smooth functioning of the office work.</li> </ul>
Noida	• Nil
Ranchi	• Nil

**13. Any other item with the permission of the Chair.**

<b>Centre</b>	<b>Matter</b>
RS Cell	<ul style="list-style-type: none"><li>• Nil</li></ul>
Ahmadabad	<ul style="list-style-type: none"><li>• Two Arc Info license are required to expedite the work &amp; clear the pendency in respect to digitization work.</li></ul>
Bangalore	<ul style="list-style-type: none"><li>• Nil</li></ul>
Hyderabad	<ul style="list-style-type: none"><li>• Nil</li></ul>
Kolkata	<ul style="list-style-type: none"><li>• Shortage of Technical Manpower. Request for filling up the post of ASSO, ASC and CO.</li></ul>
Nagpur	<ul style="list-style-type: none"><li>• Nil</li></ul>
Noida	<ul style="list-style-type: none"><li>• 3 No's of new computer system, 2 No's of AC for conference hall &amp; 1 No. of AC for office room are required.</li><li>• 3 Nos. drivers are required for next field work.</li></ul>
Ranchi	<ul style="list-style-type: none"><li>• Generator Set for Ranchi centre is inevitable to overcome the shortage of electricity supply for clearing the pendency of work and smooth functioning. Proposal is being submitted to HQ shortly.</li><li>• Vacant post of ASSO is required to be filled up at Ranchi centre to assist the SSO for technical report and field work.</li><li>• One post of Office Superintend is vacant at Ranchi Centre since long time and required to be filled up.</li></ul>

### *List of Participants*

1. Dr. Virender Singh Arya, Chief Soil Survey Officer, SLUSI, HQ
2. Dr. Munish Kumar, Soil Survey Officer, SLUSI, HQ
3. Sh. N. S. Gahlod, Assistant Soil Survey Officer, SLUSI, HQ
4. Dr. V. Ranga Rao, Sr. System Analyst, Remote Sensing Cell, HQ
5. Sh. R. L. Meena, Sr. Soil Survey Officer, SLUSI, Noida Centre
6. Sh. Mahesh Chand, Soil Survey Officer, SLUSI, Hyderabad Centre
7. Sh. Dinesh Patel, Soil Survey Officer, SLUSI, Ranchi Centre
8. Sh. Ravinder Kulkarni, Soil Survey Officer, SLUSI, Nagpur Centre
9. Dr. S. Roychowdhury, Soil Survey Officer, SLUSI, Kolkata Centre
10. Dr. S. P. Singh, Soil Survey Officer, SLUSI, Ahmedabad Centre
11. Sh. Pankaj Laghate, Soil Survey Officer, SLUSI, Bangalore Centre