#### **ANALYSIS OF DATA & DISCUSSION**

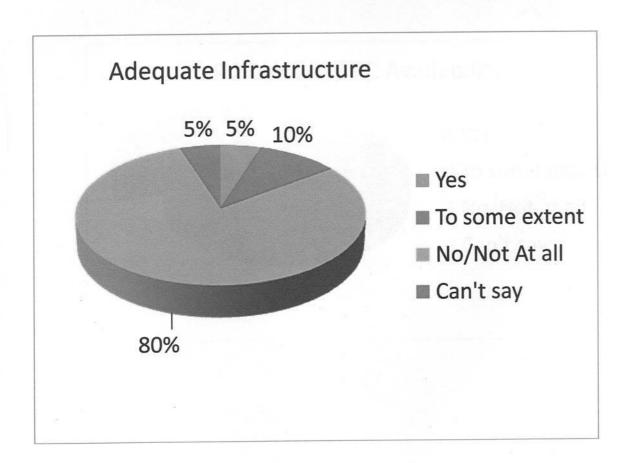
- 5.1 The Indian Council of Agricultural Research (ICAR) is an autonomous organisation under the Department of Agricultural Research and Education, Ministry of Agriculture, Government of India. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country. With over 90 ICAR institutes and 45 agricultural universities spread across the country this is one of the largest national agricultural systems in the world.
- 5.2 Ministry of Finance has made it mandatory to implement e-procurement in Government which is also applicable in case of ICAR. As per orders, e-procurement has to be adopted in totality w.e.f. 1.4.2007.
- 5.3 E-procurement required a paradigm shift in the purchase procedure, which not only needs change in mind set but also require technical manpower. Therefore, to analyze the impact of e-procurement in ICAR, a study has been undertaken as a part of dissertation of 34<sup>th</sup> APPPA to examine the issues and challengers in e-procurement in ICAR.
- 5.4 To obtain primary data from concerned officials from ICAR Headquarters and institutes, a questionnaire has been formed which is annexed. Based on the responses obtained from different Directors and officers from ICAR Headquarters/Institutes and secondary data collected through various other sources, the varies issues are analyzed.

- 5.5 Two important types of issues are involved in implementation of e-procurement in ICAR:-
  - 1. General issues; Applicable for any e-Governance project
  - 2. Specific issues; Applicable for any e-procurement project

#### 5.6 GENERAL ISSUES

# 5.6.1 Availability of adequate infrastructure

One of the main constrain in effective implementation of e-procurement in ICAR is inadequate infrastructure with ICAR institutes especially in terms of inadequate bandwidth. The pie diagram shown below indicates the clear picture of availability of infrastructure. 80% feels inadequate infrastructure.

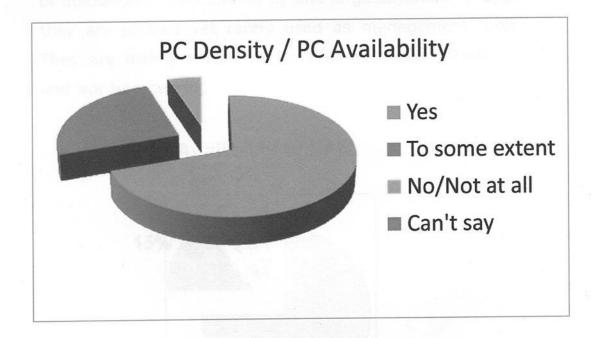


# 5.6.2 ICT and its potential for internal efficiency

Discussion and secondary data revealed that there is a lack of awareness among the bureaucracy in general, regarding the potential and progress of ICT for improving the internal efficiency of the system. Though there is a potential in application of ICT in ICAR Institutes, but they not familiar with it. Therefore, orientation of staff about ICT applications is required.

### 5.6.3 Density of Computers

Primary data indicates that PC density in ICAR institute are relatively better(70%), however, needs to be improved with latest and updated versions of PCs. Some of the Directors indicate that laptops should be given to senior level officers in the Institutes for effective use.

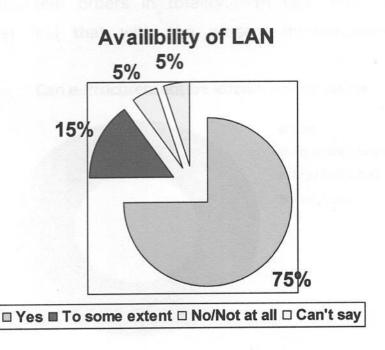


#### 5.6.4 E-literacy in ICAR

Secondary data and discussion with officials of ICAR institute reveals that there is lack of e-literacy in ICAR institutes specially the use of ICT and its application. Therefore, a training and orientation is required for all the staff and officers about e-literacy.

### 5.6.5 Network availability and accessibility

Primary and secondary data indicates that though most of the ICAR Institutes and headquarters are having LAN facilities (75%), yet availability of adequate bandwidth/speed is one of the main issues. Internet is still viewed as a tool for entertainment in communication; the e-commerce /e-procurement potential is yet to be received proper appreciation. Secondary data also reveal that level of utilization of computer is by and large abysmal. Though they are utilized yet rarely used as management tools. They are mainly meant for routine work like accounting and word-processing.



## 5.6.6 Website (content up gradation)

Secondary data and discussion indicates that most of the ICAR institutes are having their web-site in operational and same is being updated from time to time.

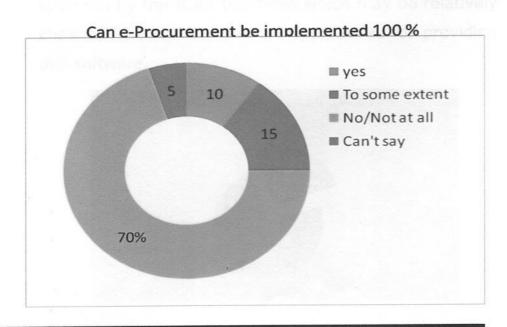
#### 5.6.7 Resources

Secondary data and discussion reveal that though Government is allowing 3% of the budget to be spent on IT, yet some of the ICAR Institutes are not able to utilize 3% fully for IT. Therefore, ICAR should give top priority for IT spending for e-procurement for next two years.

### 5.7. E-procurement specific issues

#### 5.7.1 Awareness about potential of e-procurement

Primary data reveals that most of the ICAR Institutes are aware of the orders of GOI about mandatory implementation of e-procurement. Due to one or the other reasons most of the Institutes are not able to implement e-procurement orders in totality. In fact most of them (70%) feel that with the present infrastructures and



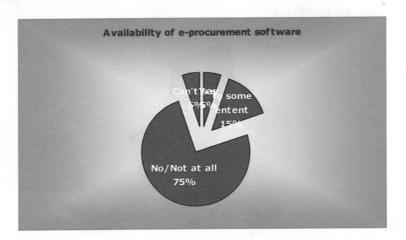
facilities it cannot be implemented 100% in ICAR Institutions especially in remote and backward areas of the country like North East Andaman & Nicobar etc. where ICAR institutes are located.

# 5.7.2. Availability of manpower for operating eprocurement software

Primary data and discussion reveals that availability of training especially for operating e-procurement software is not available in most of the ICAR institutes. Most of them feel that staff / officer are willing to adopt e-procurement and all of them feel that there is a need for orientation of staff for adopting e-procurement.

### 5.7.3 E-procurement Software

Primary data and discussion reveal that most of the Institutes (75%) don't have e-procurement software. Discussions indicated that high cost factor is the main cause for non-procuring the software. Therefore, to begin with e-tendering software should be procured by the ICAR Institutes which may be relatively cheaper. NIC should also be approached for providing this software.



### 5.7.4. Digital signature certificates

Most of the ICAR Institutes have not obtained digital signatures certificates for their officers who are dealing with e-procurement. Therefore, ICAR institute should approach Government agency preferably NIC for issuing digital signatures certificates.

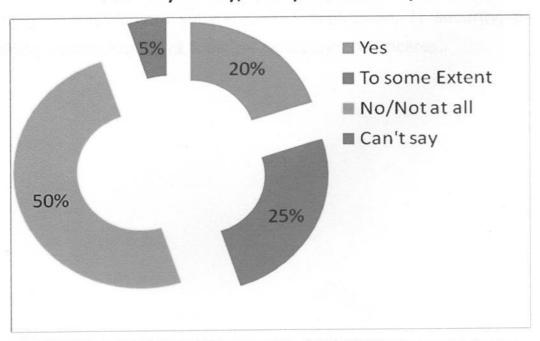
## 5.7.5. PKI (Public Key Infrastructure)

Most of the ICAR Institutes are not adopting PKI. Therefore, ICAR institute should adopt PKI.

### 5.7.6. Security

Primary data reveals that the security dimension is another constraint holding back the effective implementation of e- procurement in ICAR. ICAR should have an IT security policy and also follow IB guidelines issued on cyber security. Each institute should have a nodal officer for IT security and should procure latest security software.

# Security Policy/ IB Cyber Security



# 5.7.6. Identify key persons for maintaining and operating e-procurement software

Primary data reveals that there is acute shortage of trained manpower for operating e-procurement software. Therefore, there is a need to recruit new persons for e-procurement of software or the same needs to be outsourced.

### 5.7.7. e-enabling vendor/suppliers

Primary and secondary data indicates that lack of eenabling vendor/suppliers is one of the major causes in non implementation of e-procurement. Most of the institute could not found e-enabling suppliers for supplying ordinary goods through electronic mode.

#### CONCLUSION

5.8 Above analysis have revealed that for the effective implementation of e-procurement in ICAR, a strategy should be formed to give proper attention on above general as well as specific issues such as IT infrastructure, high IT bandwidth, manpower training, e-procurement software, ICT application, IT security, e-enabling vendor/suppliers & digital signatures certificates.