

## **Guidelines for sanction/monitoring of works being executed through ICAR funds in various SAUs-reg.**

The approved guidelines are:-

### **1. Proposal approved under the EFC:**

ICAR assistance under University Development Scheme to State Agricultural Universities is given strictly for developing / strengthening educational facilities. Educational grants, could, therefore, be used only for the approved buildings/purpose. New works may be undertaken only as per the approved EFC.

### **2. Time Frame for the execution of work :**

Work plan in the beginning of the Financial Year to be submitted by the university. The time frame must be worked out so that parallel activities like preparation of estimates etc. could be done. It will also reduce the eleventh hour exercise. ICAR may inform to the University about the approved items in principle by the end of April month & inturn university will ensure the necessary action so that the time & cost overrun could be avoided.

### **3. Location of different buildings:**

Class-rooms/Laboratory/Library/Hostel buildings/Auditorium are to be constructed on teaching campuses only.

### **4. Preparation of the estimate:**

Estimates are to be prepared by the University Estate Officer/Engineer/State PWD/CPWD/or any other Govt. approved agency, as the case may be on the basis of the current PAR as per PWD schedule/CPWD rates applying the relevant cost index. The detailed estimate may be framed for the renovation work. All estimates to be accompanied by the plan, X-Sectional drawings as per requirement. Before starting any civil work, Council's specific prior approval to its sketch plans and estimates will be necessary. The provision for the contingency may be taken as 5% for the works costing upto 1 crore & 3% for the works costing more than 1 crore. Provision for architect fees may be taken as 3% in case the services are hired from the outside, if required. All the provisions are to be made within the allocation of funds. Architect fee to be paid for new work or major renovation/remodeling/modification works.

### **5. Displaying of ICAR funded buildings:**

Buildings funded by I.C.A.R. must be displayed as I.C.A.R. funded buildings.

### **6. Green Building Concept/Water Management/Waste Management:**

This is the responsibility of the University to ensure that the provisions towards Green Building concept have been incorporated while making the estimates as well as executing the new buildings. The provision for water management / recycling of water may be made for whole of the campus. The provision for the same may be kept as 5% within the

allocation of funds. A brief note in connection with green building concept is enclosed at annexure-II for reference.

**7. Furniture & Fixtures:**

The provision for moveable furniture and fixtures may be kept not exceeding 10% of the civil cost within the allocation of funds.

**8. Special Works:**

Under University Development Scheme, ICAR assistance is not admissible for construction of separate common overhead Tank/Boundary walls/ Maintenance of buildings and renovation or modifications in the existing buildings because to provide these facilities are the responsibilities of the State Govt. However in special circumstances, renovation of a laboratory/hostel/classroom can be considered by Council provided details with full justification are submitted to Council for approval. The compound wall for the Girls Hostel complex may also be considered.

**9. Expansion / Modification of the buildings:**

Any expansion to the existing building or any modification of the laboratory for specialized purpose if desired, that works may be considered as a new construction. The very rich specifications must be avoided while renovation /modifications work. All the renovations/modifications and the specification undertaken must be approved by the designated Estate Officer/Engineer.

**10. Master Plan:**

The Master Plan for the whole campus need to be made as per the local bylaws if applicable & must be approved by Vice Chancellor/local authorities. All the new components /buildings must be part of the Master Plan.

**11. Certificate reg. land is free from all type of encroachment:**

It may be ensured by the university that the land where the construction work has been proposed is free from all type of encroachments & litigations. A certificate in this connection may be enclosed with the proposal.

**12. Proposal for the hostel building-**

- 12.1) The proposal must be supported with proper justification. The availability & additional requirement of space must be indicated.
- 12.2) The overall plinth area for the hostel building may be restricted as 12 sqm./16 sqm. per student for the hostel buildings which has been designed with common toilets.
- 12.3) The overall plinth area for the hostel building may be restricted as 16 sqm./20 sqm. per student for the hostel buildings which has been designed with attached toilets.
- 12.4) The hostel must be designed keeping the capacity of the rooms not exceeding three students.
- 12.5) The common Dining Hall along with the kitchen facility may be designed for at least 100 students. The kitchens may be equipped with modern facilities. Attached/separate kitchens may be avoided.

- 12.6) The width of the corridors may be kept as 1.8 mtr. Uniformly.
- 12.7) The common laundry facilities should be established for all the hostels.
- 12.8) Separate compound wall may be made for the Girls Hostel complexes.
- 12.9) The separate cabins in common rooms may be developed for music classes/cultural activities.
- 12.10) Provision of incinerators may be made in the girls hostel building for the smooth disposal of sanitary waste.
- 12.11) While finalizing the no. of WC & bathroom, the provision may be made as following:
- one WC for five students
  - one bathroom for four students.
  - one urinal for ten students
  - one washbasin for eight students.
- 12.12) The common room may be equipped with wi-fi system alongwith required electrical points with separate enclosure.
- 12.13) Hostel Building must be located close to the Library Building/classes as far as possible.
- 12.14) Required no. of the electrical points meeting the requirements of the students with required electrical load may be provided to avoid the loose wiring/loose connections in the rooms which is fire hazardous.

### **13. Proposals for the classrooms:**

- 13.1) The classrooms may be designed keeping the capacity for not more than 80 students.
- 13.2) The electrical points meeting the requirements of students may be made.
- 13.3) Provision of smart classes equipped with Projectors etc. may be encouraged.
- 13.4) The rooms must be well ventilated.
- 13.5) The ladies & Gents toilets must be separated with separate access.
- 13.6) Provision of placing the water coolers may also be made.

### **14. Proposal for Auditorium:**

- 14.1) The capacity of the auditorium may be designed taking as a 80% of the students strength & faculty.
- 14.2) The proposal must be supported with proper justification. The same should be designed cost effective & sustainable.
- 14.3) The availability of funds for the construction of auditorium through the State Govt. must be indicated.
- 14.4) In case the cost of construction for the auditorium exceeds A 10 crore the proposal will be sent to the evaluation committee to be constituted by the DG, ICAR for its recommendations after the technical vetting from the Director (Works), ICAR.

### **15. Proposal for Sports Complex:**

- 15.1) The sports complex facilitating the events like Volleyball, Basketwall, Gym, Football, Badminton, Kho-Kho, Athletics etc. may be strengthened so that the

sports meet could be arranged at Zonal level. The strengthening of the same may be undertaken in phase manner.

- 15.2) The proposal for swimming pool may be undertaken by the University from their own resources & will not be funded by I.C.A.R.

**16. Documentary Film & Photo Album:**

Each university shall prepare a photo film / small documentary Film on the projects/buildings funded by I.C.A.R. & will send the copy to the Education Division/ICAR so that final compilations could be carried out.

**17. Checklist:**

While seeking the allocation/sanction of funds for any type of the works a check list as enclosed at annexure-I may be duly filled & submitted alongwith the proposals.

**18. General / Advisory:**

- 18.1) The medical report of all the students & working staff in hostel building may be updated periodically at least in each semester.  
 18.2) Cycle tracks /Zones may be developed discouraging the use of Motorbikes/Motorcycle in some of the specific areas of the university campus.

**19. Education Museum**

- 19.1) Have a Central Museum instead of separate small Department wise Museum in the University.  
 19.2) The museum must have a room for electronic display with seating capacity of 50/60 persons.  
 19.3) Electronic displays can be updated as and when required.

**20. Examination Halls**

- 20.1) Centralized examination hall facility need to be developed.  
 20.2) It should have sufficient provision for ladies & gents toilets separately.  
 20.3) It should have a provision for water coolers /drinking water.  
 20.4) It should have a provision for server room/store room & supervisor room.

**CHECK LIST FOR PROCESSING WORKS PROPOSALS**

1.	Name of work	
2.	Total estimated cost of work	
3.	Whether new or ongoing works	
4.	Whether the work is as per approved EFC	
5.	Allocation in the EFC for the proposed work	
6.	In case of new works 6.1)ICAR Share 6.2)State Govt. Share/other sources	
7.	In case of ongoing works 7.1) Amount already released by ICAR	

	7.2) Amount already released by State Govt./other sources 7.3) ICAR share for remaining amount 7.4) State Govt. / other sources share for remaining amount	
8.	In case of renovation works: 8.1)Life of the building 8.2)When the last renovation was carried out undertaking the proposed item. 8.3) Justification of work.	
9.	Whether approved Master layout plan/pre-drawings/sectional drawings/attached or not	
10.	Statutory approval required i.e. if any approval of local bodies/ environment deptt. is required for execution of work.	
11.	In case of revised estimates, the details for Revision of estimates may be stated i.e. change of scope of work or higher specification/increase plinth area or any other reasons.	
12.	Whether the modification has been approved by the designated Estate Officer of the University.	
13.	Certificate indicating that the land where the construction is proposed is free from all type of encroachment & litigations.	
14.	Whether the green building concepts have been applied.	

(Signature of Estate Officer)

## **Planning for Green Building**

There is growing concern over the likely adverse impacts of climate change and growing recognition of the need to take effective steps for reduction of greenhouse gas emissions. One of the problem areas is the rapidly increasing energy demand and the need to produce it from conventional fuels. It follows that every possible effort has to be made to reduce the demand for electricity wherever possible.

It is well recognized globally that buildings are responsible for more than 40% of total energy use. Total energy use in buildings is growing, especially in developing countries, owing to rapid urbanization. In India, the real estate and construction sector is growing at a rate of about 10%. But it is also recognized that the buildings sector represents amongst the best and most cost effective opportunities for reducing energy demand because it is possible to reduce energy consumption through appropriate climate responsive building design and energy efficiency measures. It is agreed by experts that a little additional investment today to improve energy efficiency of buildings and using clean energy techniques would bring substantial cost savings over its life cycle.

Being conscious of this, the Government of India had promulgated the Energy Conservation Act in 2001, which provides for efficient use of energy and its conservation and for matters connected therewith or incidental thereto. Under the provisions of this Act, Bureau of Energy Efficiency (BEE) was set up to assist in developing policies and strategies with a thrust on self-regulation and market principles. The Energy Conservation Building Code (ECBC) was formally launched in May 2007 by the Ministry of Power for its voluntary adoption in the country. The National Building Code (NBC) brought out in 2005 by Bureau of Indian Standards (BIS) incorporated the concepts of energy efficient solar buildings. NBC-2005 has been used as the reference document for various components of a building and equipment used therein.

In view of the increased consciousness generated related to environment and climate change, efforts to construct Green Buildings got started all over the country which not only take care of energy conservation but also look into water and waste management, environmental impact, minimum destruction of natural resources. Building Rating Systems have been found quite effective globally in raising awareness in this regard. A comprehensive buildings rating system, called GRIHA, which is suitable for Indian climatic conditions, has been developed by MNRE (Ministry of New and Renewable Energy) based on the initial work carried out at The Energy & Resources Institute (TERI) and feedback received from group of architects and experts. The rating system is in harmony with the NBC 2005, ECBC 2007 and other IS codes. For operationalization of GRIHA, the Ministry has supported setting up of GRIHA Secretariat as an autonomous body.

All new buildings of Central Government/Public Sector Undertakings would at least meet the requirements of GRIHA – 3 Star, though every effort would be made by them to achieve higher star rating wherever site conditions permit to do so. Ideally, all organizations would aim at to reaching GRIHA 4-star rating. Meanwhile, the CPWD had already taken a decision to follow GRIHA ratings in all Buildings built by them.

**Ceiling cost for the different buildings/components for various Agricultural Universities' (AUs) being executed through ICAR funds.**

<b>S.NO.</b>	<b>NAME OF WORK</b>	<b>Ceiling Cost</b>
1.	C/o Hostel Building 80 students x 15= 1200 x 20,000 =	Rs. 2.5 crore
2.	C/o International Hostel Building 50 students x 20=1000x20,000=	Rs. 2 crore
3.	C/o Auditorium 600 seats @ 1,60,000/-	Rs. 10 crore
4.	C/o Museum Building	Up to Rs. 1.5 crore
5.	C/o Examination Hall	Rs. 1 crore
6.	Up gradation of Sports Complex	Rs. 2 crore
7.	Up gradation of smart class room	Rs. 6 lakh/each class