#### CHAPTER FOURTEEN

# FUNDING POLICY AND DEVELOPMENT OF IITs

"Verily, when the day of judgement comes, we shall not be asked what we have read, but what we have done"

Thomas à Kempis (circa 1380-1471)

#### CHAPTER FOURTEEN

# FUNDING POLICY AND DEVELOPMENT OF IITs

The Government of India has been the most benevolent supporter of research and development and higher education in the country. From the time of independence, research and education in sciences and technology were considered as 'good' and support for the same came through readily to the extent that the government could make funds available. The IITs were also beneficiaries of this liberal attitude on the part of the government. The pattern of government (MHRD) funding of the IITs is discussed in this chapter.

### 14.1 VARIATIONS IN FUNDING POLICY

Around 1990, there was an important shift in the funding policy which led to the introduction in the year 1993-94 of what is referred to as a *block grant system* for non-plan funding for IITs. This policy was aimed at reducing expenditure, and encouraging internal resource generation. The broad objectives of this policy were as follows:

- to infuse economy in operation, achieve higher level of efficiency to reduce administrative expenditure
- (ii) to promote internal generation of resources
- (iii) to provide greater financial autonomy by allowing interest income from corpus to be utilized to advance the interests of the institutes to meet crucial gaps.

Its main components were the following:

- a) take the base level at RE (Revised Estimates) of 1992-1993 + 10%
- b) allow endowment fund for creation of corpus
- c) transfer of non-plan savings and all revenue receipts to the corpus
- d) government grants to match savings, revenue receipts and donations
- e) force majeure for steep increase in D.A and unforeseen expenses and
- f) greater autonomy in internal administration with only constraints on pay scales and number of Group-A posts

The above funding policy was largely implemented. Although matching grants and *force majeure* grants could not be released during all the years since the time the block grant scheme was introduced, the funding for the IITs steadily rose, in particular during the recent years. The IITs themselves were impelled to build up their corpus fund and, in this respect, the IIT alumni have been extraordinary in displaying their readiness voluntarily to contribute to the well-being of their *alma mater*. Except in

case of IIT Guwahati and IIT Roorkee, the corpus in the IITs is in the range of Rs.60-100 crore. IITs have added Rs.130 crore during the year 2002-03. The fees for the students was also raised, although not abnormally. The recovery from the student fees accounted for about 6% of the total expenditure in the year 2002-03 for the IIT system as a whole. The earnings by the IITs through consultancy and research grants ranged between 15 to 22% of the total expenditure.

Recently, the government came up with another change in the funding policy and they conceived of what is referred to as "performance-based funding" for the IITs. A write-up authored by Nirupa Sen (source of information from MHRD) on the performance based funding for the IITs, along with data on plan and non-plan grants from the year 1993 to 2002-03, has appeared in Current Science, Vol.86, No.3, February10, 2004.

The Committee decided not to go into a detailed analysis of the merits and the demerits of either of the above funding policies and approaches. Looking at the grants released to the IITs in the last 2-3 years, the Committee gained the impression that, by and large, there was no major difference in the actual allocation of grants to the IITs, whichever policy was used to determine the quantum of funding.

# 14.2 GROWTH IN PLAN AND NON-PLAN EXPENDITURE

In 2002-03, the seven IITs put together spent a total of about Rs. 783 crore (of plan and non-plan funds). This has risen at an average rate of 22% per annum during 1999-03. (Figure 14.1)

The proportion of funds recovered through fees, consultancy and research grants varied between 21-28%. IITs are also accumulating a sizeable amount of funds as part of their corpus, as was pointed out earlier.

How are the IITs using these funds? Does the fund allocation priority point to differences among the IITs? To understand this we looked into the non-plan and plan fund allocation patterns.

A significant proportion of **non-plan fund** goes to pay salaries of faculty. As discussed later, the proportion of direct expenditure per student has increased from 0.38 lakh to 0.72 lakh per student between 1999-2003 (see Figure 15.3).

Figure 14.2 shows the **plan fund utilisation** by the IITs. This has been classified into three categories -buildings, academic and infrastructure. It is clear that, between 1999-03, there has been a shift in allocation towards buildings and infrastructure. The proportion spent on academic facilities has consequently decreased. Part of the reason for focus on buildings and infrastructure is due to expansion of the student population in the past few years and also due to several old buildings requiring restoration. (This classification has been done based on whatever break-up could be gathered).

The utilisation of plan funds across IITs for the year 2002-03 indicates variation from one IIT to another. IITK has spent all of the allocation on their academic needs and buildings but not much on infrastructure. IITD and IITB have paid greater attention to buildings and infrastructure. IITKGP, IITM and IITR have spent mostly on infrastructure and academic needs. In the case of IITG, the expenditure understandably was mostly on buildings and infrastructure. This is the pattern of

utilisation in 2002-2003 and it is quite conceivable that the distribution of expenditure would be different in another year. These statements may have to be revised once more precise amounts related to each of the IITs are known. The Committee finds this classification useful in assessing the utilisation of the plan funds from year to year.

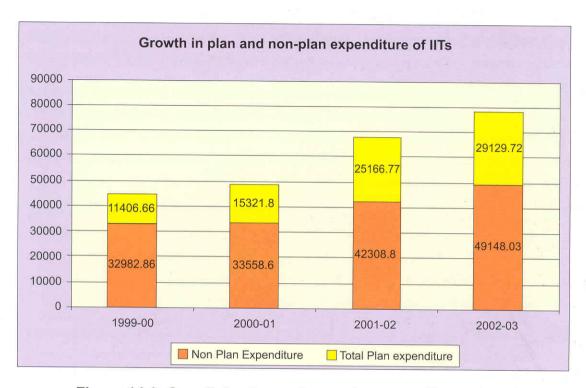


Figure 14.1: Growth in plan and non-plan expenditure of IITs

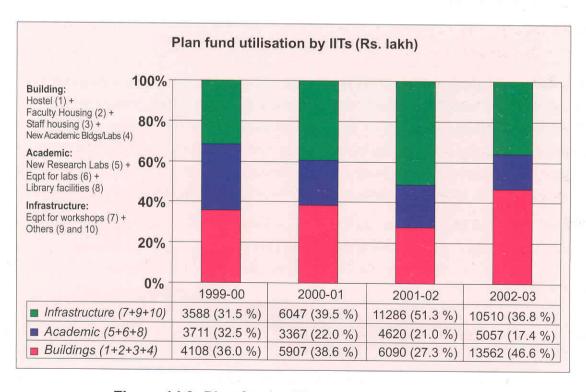


Figure 14.2: Plan fund utilisation by IITs (Rs. lakh)

## 14.3 SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS

During the visits of the review Committee to the IITs, the members have formed the following impressions:

- (i) As a result of sizeable grants received from the government, the IITs have improved upon their building infrastructure. New constructions have come up to cater for additional space required to take care of the expansion in the student population.
- (ii) There is still a large requirement in this respect because a number of buildings which came up during the early decades have degraded. The task of rejuvenation is really much beyond repair and renovation. IITs must have worldclass infrastructure in terms of labs, lecture theatres, residences etc. There is an urgent need to build quality space for various day-to-day requirements. This need is greatest in the older IITs.
- (iii) With the resources made available to them by MHRD, and quite substantially by the science funding agencies like DST, DBT, DSIR, DAE, DOS & DOD (for expanded form please see end of the chapter, p-151), IITs have substantially equipped their research laboratories with modern pieces of equipment. In view of the pace of development of experimental tools themselves, continuous upgradation of the laboratories has to be sustained.
- (iv) The areas which have not received adequate attention in the same way as the items mentioned above, are i) undergraduate student laboratories and ii) the workshops. Most of the student laboratories, if not all, require to be completely revamped. This rebuilding of the teaching laboratories is an urgent necessity.
- (v) The workshop, too, requires special attention. In modern day world, most of the tools are power tools which enable any individual to operate with a minimum amount of physical effort without having to depend on technicians. (e.g BOSCH Power Tools have been providing information on modernising workshop facilities and also have been imparting training. Similarly there may be others in the field). This aspect has to be particularly studied so that the IIT students are trained in the use of such modern workshop practices which are likely to stand them in good stead in later life. In this respect, even the syllabus for workshop practice may have to be redone, if not already revised. Similarly, more and more automation could be incorporated in several operations, where experimental and R&D work are carried out.

Based on the above observations, the Committee recommends an allocation of Rs. 20 crore for each IIT during each of the next five years. This allocation should be directed to particular areas such as teaching laboratories and workshops and the related infrastructure.

The Committee has also recommended certain additional allocations for research and research fellowships, for initiation grants to newly recruited faculty, for supporting faculty overseas visits for collaborative work, for instituting visiting chairs, for engaging post doctoral research associates and for visiting industry personnel.

In summary, the Committee recommends the following approach to funding the IITs:

- (i) An annual allocation of plan and non-plan funds as per the funding policy the Ministry decides upon.
- (ii) Over and above item (i), each of the IITs may be given an allocation of Rs. 20 crore each year for the *next five years* for improving upon their teaching laboratories, workshops and the associated infrastructure. The IITs need to be supported to have world-class infrastructure
- (iii) Additional grants have to be made available for research enhancement and for meeting the IPR requirements as explained in Chapters 6, 7, 10 and 11.

#### Abbreviations used:

DST - Dept. of Science & Technology

DBT - Dept. of Biotechnology

DSIR - Dept. of Scientific & Industrial Research

DAE - Dept. of Atomic Energy

DOS - Dept. of Space

DOD - Dept. of Ocean Development

MCIT - Ministry of Communication and Information Technology

DRDO - Defence Research and Development Organisation