



**NIV Pune, monkey deformed with arthritis having been confined in this cage for most of his life. His lower limbs are shrunk and undeveloped**

**T**he trail of mismanagement and misadministration of research in various bio-medical institutions is so murky that there is not even a glimmer of hope that anything worthwhile would come out of their endeavours. The various Comptroller and Auditor General reports of institutions under the Indian Council of Medical Research and other autonomous bodies are startling.

The most recent institution that has gone on the defensive is the National Institute of Virology (NIV), Pune. There 37 rhesus monkeys were being researched upon in dark, damp rooms in a "temporary primate facility" that has been in existence for 50 years. The rooms did not have electrical fittings, were bare and had no lights or fans. The water served to the monkeys was infested with mosquito larvae. No health record or post mortem reports on monkeys who died were available. In one year 37 had died, but nobody knew why or how. This was not surprising given that the lab had only one veterinarian to take care of over 40,000 animals. Research was being conducted on monkeys who were 15 to 29 years old. The monkeys were exhibiting symptoms of zoonosis, a debilitating psychological illness caused by stress and confinement.

## Research without Results CAG Indictments on Research Labs

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Several monkeys were deformed, one was paralysed and others had their toes or fingers missing. Some had arthritis or atrophy from lack of exercise. Many had skin disease. What scientific results could possibly have been expected from experiments on these poor monkeys is impossible to imagine.

Even the report of the Comptroller and Auditor General (CAG) reveals that NIV does not have the infrastructure for handling hazardous viruses of P3 and P4 category. A project for construction of such a facility was conceived in June, 1977 but after a period of 23 years and after spending Rs. 12.87 crores the facility has not yet

been established. In normal circumstances the less hazardous viruses belonging to P1 and P2 category were supposed to be handled with the existing facilities available at the NIV. The establishment of a separate Microbial Containment Complex (MCC) was necessary as 99 cases of laboratory infections had occurred before 1976 due to the lack of containment facility at NIV. If the staff and researchers were getting infected, one wonders what would be the fate of the poor animals and the research taking place on them.

The Government of Maharashtra allotted the land in 1982 and the project was to be completed in two



**NIV, Pune : monkey escaped from its cage : an Institute experimenting on the AIDS virus should at least guarantee proper containment.**



**Wounded buffalo at the College of Veterinary Sciences at Marathawada**

phases, Phase I by March, 1985 and Phase II by March, 1990, at an estimated cost of Rs.11.67 crores. In the meantime, the National Dairy Development Board (NDDB) in Bhopal had established a high containment laboratory in the second half of 1990. If NIV had the real will to execute the project, they could have similarly ensured that the facility actually came into existence. The compound wall was finally completed in 1987, though the construction of the wall started in 1982-83. The development work taken up in 1982-83, was still not completed at the end of March, 2000. At the same time, the Institute spent Rs.1.74 crores on pay and allowances, TA and other charges on 15 employees, including six

watchmen during 1990 to 2000 on the project which was yet to become operational. Why is NIV now making excuses for their inaction?

At the Indian Veterinary Research Institute (IVRI), Bareilly, 232 in-house projects were taken up between 1995-2000, including 108 projects carried over from previous years. The results of these researches were extremely disheartening. Out of 120 in-house research projects completed between 1995-2000, 96 projects were declared

closed without meaningful outcomes by the Director in 1996-97 on the plea that they had already outlived their utility. Final reports of 32 projects were not submitted though completed four years back. Thus, substantial time and expense had been incurred on projects with no results. Out of 133 completed projects of the same period, only five technologies were developed and one technology was transferred for commercialisation. Only one provisional patent was filed in favour of the IVRI. How many animals must have been sacrificed for these projects with no benefit to society?

An example of the waste is the improvement of goats for *pashmina* production which was taken up in 1986. While reviewing the project, ICAR (Indian Council for Agricultural Research) had advised its closure in 1990 as the research had been ill-conceived. The area selected for the project was not suitable for the *pashmina* goat both in terms of altitude and rainfall because there was no goat population around Mukteshwar for extension of any technology due to heavy rainfall and mountainous

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**Central Research Institute, Kasauli: overcrowded experimental sheep, including lambs**

terrain, The project had also not achieved any practical or economic utility. It was recommended that the valuable germ plasm be passed on to the Government of Jammu & Kashmir and Himachal Pradesh. The Director, IVRI, was asked to discontinue the project. However, IVRI did not follow the recommendations and continued the project up to March, 1997. They did not even pass the germ plasm on to the other States. Rs.76 lakhs was spent in these seven years after the recommendation to close the project. IVRI continues to spend on the upkeep of these goats, even after closure of the projects.

The project on improvement of the buffalo herd was in progress from 1970. While reviewing the project in 1990, ICAR directed that the project be stopped as its objective had not been achieved and with the establishment of the Central Institute for Research on Buffalos in 1985 at Hissar, there was no need for IVRI to continue with the same. IVRI, however, disregarded this advice and even up to March, 2001 had not submitted its final report.

In 1982, the Mukteshwar campus of IVRI undertook a project studying cattle production under temperate climatic conditions of Mukteshwar. The objectives of the project were to generate basic data/scientific information about production, reproduction, health and management of exotic and crossbred cattle under temperate conditions and development of a hill suited cattle breed for temperate, hilly regions which could perform well under scarce fodder availability and vagaries of climatic conditions. The objective was to augment income generation for local people. However, in 1996 the project was closed as it had outlived its utility without accomplishments. The list goes on in a similar vein.



**Sheep with osteoporosis and skin infection at the AIIMS, now rehabilitated with the CPCSEA**

### **Nil in Publications**

In 1998-99, out of a scientific manpower of 314, only 14 papers were published in a foreign journal. A total of 361 papers were published and 174 papers presented in seminars. The actual practical results of these papers are of course another issue altogether.

**The CAG report on the research projects in All Indian Institute of Medical Sciences (AIIMS) is equally damaging.** Though the objective of the Institute is to develop medical research with the intention of using the results to enhance teaching standards and specialised areas of medical treatment, the expenditure on research is only Rs.7-12 crores, which is barely 1-2 per cent of the total expenditure of AIIMS. However, looking at the results of the research, it is perhaps better that more money has not been spent for such dubious research. From 1995-96 to March 2000 the Institute claimed to have completed 185 projects. In fact, the report observes that higher allocations would not improve matters until the institutional arrangements improve and the projects are monitored for results. Final reports have been

submitted on 86 studies by the principal investigator and in the remaining 99 projects the final reports were yet to be submitted. None of these findings resulted in commercialisation or issue of patents. Out of 154 projects/schemes said to have been completed between 1991-95, final reports of 54 projects were still to be submitted in March, 2001. If the results of the research are not submitted immediately, it is likely that the results go waste. It appears that even the required review of the research projects are not being conducted on a six monthly/yearly basis. The CAG report observes that the Institute does not seem concerned with such lapses.

Advances are paid to investigators to undertake their projects. During the audit it was seen that Rs.41.86 lakhs were outstanding with investigators for 110 projects, 42 of these had been closed 4-10 years ago.

**The audit observation on The Central Drug Research Institute, Lucknow, castigating them for expenditure of over Rs. 6 crores on gifts and foreign travels is also severe.** Why is an institution whose primary function is research spending its money so extravagantly on items not

justified to meet the objectives of the institution?

The blunders continue. The ICMR imported 1000 American glaucoma valves for a research project at a cost of Rs. 70 lakhs in January 1994. The results of the study were to be used for the National Blindness Control Programme. Though the valves arrived in 1994, ICMR finalised the participating centres in June 1995 and initiated the project in August 1995. Out of these 1000 valves, 435 were distributed to 11 research centres and 65 remained in stock till November 2000 when the expiry date of the valves was November 1998. Only 248 of these could be utilised. 500 valves were given for free distribution to various hospitals and surgeons through the Guru Nanak Eye Centre (GNEC). Out of these only 206 valves were distributed on October 22, 1998. The chances of their utilisation before the expiry date are remote. There is no record of the balance handed over to GNEC.

In 1983, the ICMR launched a major R&D project for development of a contraceptive vaccine using immunological approaches. The



**School of Tropical Medicine, Kolkata: dilapidated room and rusted, neglected cages passing off for an experimental lab.**

project was to be implemented in six different but complimentary parts involving six agencies, namely, National Institute of Immunology (NII), New Delhi, Indian Institute of Science (IIS), Bangalore, IIR Bombay, Central Drug Research Institute (CDRI), Lucknow, Post Graduate Institute of Medical Research (PGIMER), Chandigarh and National Institute of Health and Family Welfare, (NIHFW) New Delhi. The project was

administered by ICMR from 1983 to 87 and then taken over by the Department of Biotechnology. During the period 1983 to 1992 an expenditure of Rs. 12.65 crores was incurred. Due to delays in achieving the targets, the project had to be extended for another five years at an additional cost of Rs. 6 crores. NII and IIS were to have completed three phases of their clinical trials by March, 1992. However by that time even the phase one trial had not been completed. The adjuvant developed by CDRI for use in the male and female vaccine was not used by NII and IIS resulting in a useless expenditure of Rs. 1.09 crore. The CDRI was also given an extension of five years for its research though the product it had developed was never used.

To test the male vaccine, developed by the IIS, fertility tests on monkeys had to be carried out by NIHFW, by March, 1990. These were delayed due to the non-availability of proven fertile female monkeys, mating cages, techniques for monitoring cyclicity of female monkeys to determine the ovulatory period, and lighting systems. A uniform anti-fertility effect could not be determined finally and a reversibility study also could not be undertaken by cohabitation with proven fertile female monkeys. No new antigen was received from IIS for study. It would be interesting to ascertain whether the experiments have finally reached their logical conclusion. In the meantime the monkeys are being prodded and subjected to unnecessary and meaningless tests for over fifteen years.

Can we allow such utter lack of accountability to go unchecked forever?

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**Andhra Medical College : crude experimental cage with brick placed on top.**