

subsequent generations, individual dose estimates are weighted by the child expectancy of the patient so as to obtain an estimate of the "genetically-significant dose". The estimates so obtained vary for different countries by a factor of almost 10 and range from less than one tenth to more than one half of the annual dose from natural sources.

(vii) The mean radiation dose received annually by workers in most types of work involving radiation exposure is reported to be less than six times that received from natural sources.

(viii) Radiation injuries are now very rare, and when they happen, can usually be attributed to carelessness.

#### *Genetic Effects of Radiation*

(ix) It has been estimated that about 4 per cent of all live-born children suffer from various forms of genetically determined diseases, of which about 2 per cent appear to follow simple rules of inheritance. The other 2 per cent have a more complex mode of transmission. For computational purposes a figure of 3 per cent will be used. Therefore the natural incidence of hereditary diseases maintained by receiving mutation is estimated at 30,000 per million live births. The mutations responsible for that incidence would increase by about 300 per rad under conditions of chronic exposure of males in a parental generation.

#### *Effects of Radiation on the Immune Responses*

(x) The immune system appears to have large built-in factors of safety, so that it can withstand substantial injury and recover from damage. Although effects on human lymphocytes in culture have been noted even at doses of 10 rads, the observable damage to the immune system such as changes in antibody formation resulting from whole-body doses of the order of tens of rads is unlikely to be the effect causing the greatest concern.

#### *Radiation Carcinogenesis*

(xi) Miners exposed to high levels of radon and its radioactive daughters

show a very high incidence of lung cancers. The frequency appears to rise in proportion to the level and duration of exposure. The range of exposures within which the increased incidence has been reported corresponds to doses of at least a few hundred rads of alpha radiation. However, dosimetry is difficult and the role of other carcinogenic factors such as smoking habits has not yet been fully assessed.

(xii) The effects of pre-natal irradiation have been the subject of much research. A number of large surveys of children that were exposed to radiation for medical reasons before birth, and that must have received thereby doses of at most a few rads at high dose rate, indicate that pre-natal irradiation is associated with a significant increase of the risk of malignancies in the first 10 years of life. The extent to which the increase risk of malignancies in the medically irradiated is due to radiation rather than to an association with the cause that prompted the irradiation must still be considered as open.]

#### INCREASE IN PRIVATE SECTOR INVESTMENT

1586. SHRI SARDAR AMJAD ALI :

SHRIMATI SUMITRA G. KULKARNI :

SHRI KALI MUKHERJEE :

SHRI N. R. CHOUDHURY :

Will the Minister of INDUSTRIAL DEVELOPMENT AND SCIENCE AND TECHNOLOGY be pleased to state :

(a) whether it is a fact that recently considerable increase has been made in the private sector investment;

(b) whether such increase is due to private or public financing; and

(c) if so, the details thereof ?

THE MINISTER OF INDUSTRIAL DEVELOPMENT AND SCIENCE AND TECHNOLOGY (SHRI C. SUBRAMANIAM) : (a) to (c) A statement is attached.

## STATEMENT

While no precise figures of private sector investment are available, the following statement, reproduced from the Economic Survey 1972-73, gives capital

raised by non-Government Companies under approvals given by the Controller of Capital Issues in 1970, 1971 and January-September, 1972 as compared to January-September, 1971 and 1970 :

(Rs. lakhs)

Type of Issue	1970	1971	January—September		1972
			1970	1971	
Initial (Equity & Preference)	2721.14	2155.02	2452.93	1416.97	545.98
Further Do.	2320.79	1971.61	2016.12	1732.31	1521.91
Debentures	1273.23	872.30	1145.20	648.50	5110.32
Bonus	5180.78	3180.92	4250.20	2438.03	2306.01
Loans	603.02	403.89	233.71	329.51	598.43
TOTAL	12098.96	8583.74	10098.16	6565.32	10082.65
(TOTAL excluding bonus issues)	(6918.18)	(5402.82)	(5847.96)	(4127.29)	(7776.64)

The financial assistance sanctioned by the IDBI, IFCI, ICICI, UTI and the IRCI has increased from Rs. 183.7 crores in 1970-71 to Rs. 259.9 crores in 1971-72. The corresponding figures of assistance utilised in these two years are Rs. 120.9 crores and Rs. 150.0 crores respectively.

It will be seen that there has been an increase in both the capital raised by non-Government Companies as well as in the financial assistance granted by public financial institutions. These, however, are broad overall trends, and further details in regard to private sector investment and its financing are not available.

## राज्यों में कार्यकारी दलों की स्थापना

1587. श्री सुरज प्रसाद : क्या योजना मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या यह सच है कि दिसम्बर, 1971 और जनवरी, 1972 में योजना आयोग तथा राज्यों के मुख्यमंत्रियों द्वारा 21 कार्यकारी दलों की स्थापना का निर्णय किया गया था; और

(ख) यदि हा, तो वह योजना कब तक कार्यान्वित कर दी जायेगी ?

## †[WORKING GROUP IN STATES

1587. SHRI SURAJ PRASAD : Will the Minister of PLANNING be pleased to state :

(a) whether it is a fact that a decision was taken between by the Planning Commission and the Chief Ministers of the States in December, 1971 and in January 1972 to set up 21 working groups; and

(b) if so, by when the scheme will be implemented ?]

योजना मंत्रालय में राज्य मंत्री (श्री मोहन धारिया) (क) और (ख) योजना आयोग और मुख्यमंत्रियों के मध्य हुई किसी भी बैठक में इस प्रकार का कोई निर्णय नहीं किया गया था। किन्तु पांचवी पंचवर्षीय योजना तैयार करते समय विभिन्न क्षेत्रों के संबंध में नीति और प्राथमिकता संबंधी सुझाव देने के लिए योजना आयोग ने बड़ी संख्या में

[ ] English translation.