TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) Yes, Sir. The Central Council for Research in Ayurveda and Siddha, an autonomous organization under the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) is developing herbo-mineral female oral contraceptive drug "Pippalyadi Yog". The drug is under clinical trials.

(b) and (c) After the formulation has been found effective in intra mural research of the Council, the project has been taken up by the Department of Family Welfare, Government of India to further access the efficacy of the formulation. The drug is found to be safe during Phase-I, clinical trials conducted at AIIMS, New Delhi, JIPMER, Pondicherry, KEM Hospital, Mumbai and PGIMER, Chandigarh after due approval from Drugs Controller General of India. Now, the Phase-II clinical trail will be initiated in the above said institutes. The National Institute of Pharmaceutical Education and Research, Mohali will supply the capsules after ensuring quality and will simultaneously carry out the shelf life studies and estrogen assay. The Government is vigilant to protect the patent right of this drug.

Export of herbs, germplasm and micro-organisms

1219. SHRI K. RAMA MOHANA RAO: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) what steps are being taken to convert bio-diversity resources into value added products for use in domestic requirements and also for exports; and
- (b) the total amount of herbs, germplasm and micro-organisms exported by India during the last five years, year-wise?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) Some Central Ministries/Departments/Institutes are supporting research programmes for converting biodiversity resources into value-added products for use in domestic requirements and also for exports. The Department of Biotechnology (DBT) has sponsored various research and development projects for developing different value added products such as herbal drugs, natural dyes, enzymes, biomolecules, biopesticides, biofertilizers

and immobilized microbial consortia for degradation of oily sludge etc. The National Bioresource Development Board (NBDB) has been set up mainly for development and sustainable utilization of bioresources especially for the development of new products and processes through biotechnological interventions. The DBT has recently established an autonomous institute namely Institute of Bioresources and Sustainable Development (IBSD) at Imphal, Manipur. The Council of Scientific and Industrial Research (CSIR) has a network programme on "Discovery of new bioactive molecules" where many national labs/universities are involved in collecting microorganisms from different ecological ninches, making extracts and screening the same against targets. These microorganisms are preserved in Microbial Type Culture Collections at IMTECH, Chandigarh for future use.

(b) Based on the available data, the total amount of herbs (such as Psyllium husk and seeds, opium poppy, seena leaves and pods and tukmaria) exported during the last five years are: 26, 433 tonnes (1996-97); 25,991 tonnes (1997-98); 22,176 tonnes (1998-99); 23,030 tonnes (1999-2000); 27,863 tonnes (2000-01). The year-wise export of germplasm lines of various crops from India for research purpose to other countries during the last five years are 174 germplasm accessions (Year 1998), 546 germplasm accessions (Year: 1999) 250 germplasm accessions (Year: 2000), 100 germplasm accession (Year: 2001) and 172 germplasm accessions (Year: 2002). There is no authentic data available on quantity of the export of micro-organisms during the last five years.

Development of Chiria Iron ore mines of IISCO by SAIL

1220. SHRI DIPANKAR MUKHERJEE: Will the Minister of STEEL be pleased to state:

- (a) whether SAIL is investing Rs. 300 crore in development of Chiria Iron Ore Mines of IISCO, as reported in the media recently;
- (b) if so, whether the same is carried out as a part of revival package of IISCO; if not, the reasons therefor;
- (c) the amount mobilised, so far, through market bonds floated by IISCO for its revival;