

(The basis of calculations for different countries are not known and may differ from country to country).

(d) In order to bring down the specific energy consumption rate in SAIL steel plants, several modernisation measures are being considered, some of which are:

- stamp-charging of cial charge;
- partial briquetting of coal charge;
- Modernisation of the existing sinter plants and installation of new sinter plants;
- intensification of blast furnaces;
- replacement of open hearth furnaces by oxygen steel making converters;
- large scale adoption of continuous casting;
- modernisation of rolling mills;
- introduction of computer control system in all the shops;
- introduction of waste energy recovery processes like coke dry quenching, heat recovery systems in sinter plant, reheating furnaces, power generation using blast furnaces top gas pressure.

#### Energy and manpower used in coal Production

600. SHRI PUTTAPAGA RADHA-KRISHNA: Will the Minister of STEEL, MINES AND COAL be pleased to state:

(a) whether it is a fact that energy and manpower used in the country for production of coal per tonne is one of the highest in the world;

(b) if so, what are the details thereof and how it compares with other advanced countries; and

(c) what corrective steps are proposed to be taken by Government in this regard?

THE MINISTER OF STEEL, MINES AND COAL (SHRI VASANT SATHE): (a) and (b) Average Electrical Power consumption in the subsidiaries of Coal

India Ltd. varies from about 9 units upto 24 units per tonne of coal produced. As compared to other advanced countries, the power consumption per tonne of coal is on a lower side, since the mechanisation level in our country is low. Electrical power consumption depends on the mechanisation level.

Manpower used per tonne of coal production is reckoned in terms of output per manshift. The output per manshift (OMS) has steadily risen from a level of 0.77 tonnes in 1981-82 to 0.87 tonnes in 1984-85 in Coal India Ltd., but has been around 0.7 tonnes in Singareni Collieries Co. Ltd. In comparison to developed countries, O.M.S. is low in our country. In the developed countries like U.S.A., USSR, Poland, U.K. etc., the OMS generally exceeds 1.5 tonnes mainly because their mechanisation level is very high as compared to our country. The Geo-mining conditions also vary.

(c) Efforts are being made to increase productivity in coal industry by mechanisation, adopting advanced technology, redeployment of surplus labour, by having more open cast mining and by improving working conditions in coal mines.

#### Foreign indebtedness of the country

601. SHRI P. N. SUKUL: Will the Minister of FINANCE be pleased to state:

(a) what is the total foreign indebtedness of the country as on 31st March, 1985;

(b) what are the details thereof; and

(c) by when this present foreign indebtedness of the country is expected to be liquidated finally?

THE MINISTER OF STATE IN THE MINISTRY OF FINANCE (SHRI JANARDHAN POOJARI): (a) and (b) The estimated total foreign indebtedness of the country as on 31st March, 1985 works out to Rs. 23932 crores in respect of Government loans, Rs. 758 crores in respect of Non-Government loans. Further approvals for Rs. 7259