

(b) & (c). Yes, Sir. Tatas have informed Government of their desire to put up an alloy and tool steel plant with an initial capacity of 100,000 tons of ingots or 60,000 tons of finished steel per year.

Shri Morarka: May I know the capacity of the plant which the Government propose to put up?

Sardar Swaran Singh: The initial capacity will be 40,000 tons, and there will be provision for its expansion to 80,000 tons in the form of ingots.

Shri Morarka: Is it not a fact that by 1965 our requirements are estimated to be about half a million tons, and in view of that may I know whether Government is considering putting up a bigger and larger plant?

Sardar Swaran Singh: It is not very easy for me to confirm the figure of half a million tons, but it is no doubt correct that the demand is likely to expand quite rapidly, and it is for this reason that the public sector plant may have to be pushed up to a capacity of 160,000 tons a year, but that will depend upon the project report and also a closer assessment of our requirements.

Shri T. B. Vittal Rao: May I know whether this project report which has been submitted by Tatas will be referred to Messrs. M. N. Dastoor & Co., who have been asked to submit a project report for the manufacture of this steel?

Sardar Swaran Singh: I have not said anywhere that Tatas have sent a project report. Therefore, there is no question of sending the project report of Tatas to Dastoor & Co. The firm of Tatas has shown interest in setting up a plant for the manufacture of special steels. We have not decided anything on that yet.

Shri Morarka: May I know the estimated cost of this Government plant and the date by which it is likely to go into production?

Sardar Swaran Singh: So far as the schedule is concerned, I have already stated on an earlier occasion in the House that the detailed project report will take about seven months. After the receipt of the project report, it will take about 30 to 36 months for establishing the plant. So far as the estimated cost is concerned, it is anywhere between Rs. 12 and Rs. 15 crores, but a great deal will depend upon the ultimate production target that is accepted by Government.

Low Shaft furnace at Jamshedpur

*590. **Shri T. B. Vittal Rao:** Will the Minister of Scientific Research and Cultural Affairs be pleased to state:

(a) the nature of tests carried out by the pilot low shaft furnace at Jamshedpur;

(b) whether non-metallurgical coal has been used in the manufacture of steel; and

(c) the States from which iron ores have been used during these tests?

The Minister of Scientific Research and Cultural Affairs (Shri Humayun Kabir): (a) Tests are being conducted for obtaining pig-iron utilising inferior grades of iron ore and/or coal.

(b) Only pig iron is made in the Low Shaft Furnace, and non-metallurgical coal has been used.

(c) Iron ores from Bihar and Orissa have been used in the investigations so far.

Shri T. B. Vittal Rao: May I know whether iron ores from Andhra and Madras States have been used so far?

Shri Humayun Kabir: I have already said that so far only iron ore from Bihar and Orissa have been used, but it is our intention to use iron ore from every part of India in course of time.

Shri T. B. Vittal Rao: From where has the coal that has so far been used been drawn—From Bihar and Bengal?

Shri Humayun Kabir: It has been from that area, but we propose later on to try also coals, non-coking coals and other solid fuels like carbonised lignite from Neyveli or Rajasthan, but at the moment it is from the Bihar and Orissa area.

Shri Tangamani: May I know whether the Government will consider the question of sending the Salem iron ores for testing at this plant?

Shri Humayun Kabir: I have already stated that we have started the experiment with the Bihar and Orissa iron ores; and in course of time, as the experiments proceed; low-grade iron ore and low-grade fuel from every part of India will be examined here.

Shri Naushir Bharucha: May I know whether producing pig iron in low shaft furnace is more economical than the ordinary method of production?

Shri Humayun Kabir: It is still in an experimental stage, but we expect that in any case it will enable us to utilise our almost unlimited resources of iron ore by the use of our most unlimited resources of low-grade coal.

Shri Naushir Bharucha: May I know whether the quality of pig iron is the same?

Shri Humayun Kabir: Again, the matter is in an experimental stage, but the first results seem to indicate that there is no difference in the quality of the pig iron.

Sardar Iqbal Singh: May I know whether these tests have been carried out also on the low-grade iron ore of the Narnaul area of Mohindergarh district of the Punjab?

Shri Humayun Kabir: I have already answered this question.

Shri Panigrahi: When this experiment, as has been said by the hon. Minister, has not proved successful, how is it that low shaft furnaces are being operated in different parts of the country, and a decision has also been taken to issue more licences for these things?

Mr. Speaker: He has not said so.

Shri Humayun Kabir: I do not know how the hon. Member imagined that the experiment had not proved successful.

Shri Panigrahi: The hon. Minister said that Government were not sure whether it was economical or not.

Mr. Speaker: That does not mean that he has already come to a decision that it is useless. There is no meaning in arguing in this manner. The hon. Minister, on the other hand, says that the quality of pig iron is the same in both the cases, and that this is still in an experimental stage. Therefore, what is the meaning in coming to a conclusion that it has already failed?

Shri T. B. Vittal Rao: May I know the Fe content of the iron ore so far used in this furnace?

Shri Humayun Kabir: It is low-grade ore; but I cannot give the exact percentage of mineral in the ores which have been used.

Mr. Speaker: It is a matter of detail.

Shri T. B. Vittal Rao: It is not a matter of detail. It is low-grade iron ore, and, therefore, I want to know....

Mr. Speaker: Order, order. I am not going to allow this question. The hon. Minister is not an expert in that line. So, what is the use of going into details about percentage and so on?