

the industries here in Ranchi?

**Bhatnagar:** Yes, I think so, because many of the countries who are members of the Non-Aligned are developing or slightly underdeveloped countries, and there should be a lot of opportunities for us to get together with them, helping their own industrialization in the field where we have experience. Algeria is one of those countries, and we had some discussions with them about a month ago; a team from here is about to go there. They have some machine building plants, and they want expertise from us on the design and manufacturing side. . . . So I think there will be a lot of prospects for us.

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## Interview: S. Samarapungavan

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# 'Joint thinking to revive world economy'

*Since 1980, S. Samarapungavan has been the chairman of SAIL, the Steel Authority of India, Ltd. SAIL, formed by the Indian government in January 1973, serves as an umbrella organization for the steel industry in the public sector in India. It oversees five integrated steel plants with 250,000 employees, which produce more than 80 percent of the total Indian steel output of 9.5 million tons of finished steel per year.*

*Samarapungavan, a graduate of Calcutta University, has dedicated his life to the steel industry. Before coming to SAIL as one of its directors in 1978, he was managing director at Bokaro Steel, Ltd. He has frequently led business delegations to the U.S.S.R., Europe, and the United States. The following interview was conducted by Hartmut and Ortrun Cramer on March 28 in New Delhi.*

**EIR:** Could you elaborate on how the steel industry in the public sector in India developed?

**Samarapungavan:** During the independence movement, the Indian National Congress was very acutely aware of the necessity to have an economic plan, because political independence would be a chimera unless it was backed by economic development. During the struggle against the British in 1938, the Economic Planning Commission was formed with Pandit Jawaharlal Nehru presiding over it. When the country became independent, the commission immediately thought in terms of five-year plans. In the first plan, a top priority after development of agriculture and education was the development of basic industries.

At that time, steel production in India was scarcely 1 million tons, produced by two private companies, the Tata Iron and Steel Company and the Indian Iron and Steel Company. In the first five-year plan, three integrated steel plants were projected, one in Bhilai, one in Rourkela, and one in

Durgapur, together with an alloy steel plant there.

The first plant to be conceived was the Rourkela steel plant, with German collaboration. The construction work started there in 1955, and the first blast furnace started production in February 1959. The Bhilai steel plant was commissioned, with Soviet assistance, one day after Rourkela; the blast furnaces started simultaneously in these two plants. Durgapur was launched in 1960 with British collaboration. Shortly after that, the alloy steel plant started up. These plants expanded—Bhilai to 2.5 million tons, Durgapur to 1.6 million, and Rourkela to 1.8 million tons crude steel capacity.

In the mid-1960s, plans came up for an additional steel plant at Bokaro. Initially they fell through, because of certain conditions laid down by the Americans, which were totally unacceptable to the government of India. The plant was built with Soviet assistance, and the first blast furnace was commissioned in 1972. The plant's initial capacity was 1.7 million tons, but it was steadily expanded. Today the plant is operating at 2.5 million tons, and a 4-million-ton capacity will be commissioned this year. Bhilai was expanded to 2.5 million tons of crude steel capacity; it is now scheduled to expand to 4 million tons, and these assets will also be commissioned this year.

**EIR:** What about the Indian Iron and Steel Company?

**Samarapungavan:** The Indian Iron and Steel Company, which was under private control and operated very well until about 1967, declined very badly after that and had to be closed down. The government took over in 1972 and nationalized it three years later. Since then, investment has been made for some of the equipment which had been neglected. The plant has revived quite well, though it is still one of our most obsolete plants.

In the past two years, this plant has come up to a capacity utilization of only 63 percent, whereas Bhilai usually was operating at 95 to 100 percent. Tata Iron and Steel Company, which doubled its capacity from 1 million tons to 2 million tons of crude steel, is also operating at about 100 percent of capacity. Rourkela Steel plant has suffered very badly this year, since there has been a severe drought during the past two or three years, which has affected the hydro-electric power stations which are the main resources supplying the state of Orissa; and the upcoming thermal plants are still having initial problems. This year, the Rourkela capacity utilization has come down to about 80 percent, but last year, when the power situation was much better, they reached 89 percent. Durgapur, for a long time considered to be the sick child in the public sector, has come up quite remarkably well during the last few years, and it is now at 70 percent of capacity utilization.

In the Indian iron and steel industry as a whole, capacity utilization of the integrated steel plants last year was around 80 percent, including the Tata Company, and this year it will be the same. This is in spite of the sharp downfall in capacity in Rourkela of about 9 percent; the other steel plants have

made up for it. So this year we will end up in steel at about the same level with almost 9.5 million tons of finished steel.

In the last 18 months the demand within the country leveled off, so we have exported steel to Europe, the United States, the U.S.S.R., Japan, and to many of the developing countries. But since they are now all in trouble, too, our position is a little more difficult. Yet, when we consider the world situation, our capacity utilization of 80 percent in the last two years, the best we ever had so far in India, compares very favorably even with Japan, which has gone down to 62 percent, not to speak of the United States. We can feel happy about the fact that we do not have to lay off workers, nor have we deliberately cut back production, although our friends in the power sector have certainly helped us in this.

**EIR:** Lack of power is obviously a big problem in India. What is your solution to this?

**Samarapungavan:** We have taken certain precautions, though this will not be the most economical solution. We are building substantial captive power stations for the steel plants. Not only in the steel industry, but also in the aluminium industry, which requires large amounts of power, we are building power plants.

**EIR:** Why don't you build nuclear power plants?

**Samarapungavan:** I will put it very frankly. Nuclear power plants have their future in India. But they will not be able to replace thermal power plants, because we have a large amount of coal around the country, and it will be difficult to replace that with competitive nuclear plants. Secondly, our experience with capacity utilization under laboratory nuclear power plants has so far not been too good. The state of Rajasthan is primarily dependent on nuclear power, and the capacity utilization there is not very good.

But nuclear power is one of the essential supplements in India, because ours is a very large country, and there are many areas where it is better to run nuclear power plants than to carry coal across the country. So we have to follow a pragmatic path with thermal power plants, nuclear power plants, and to a limited extent hydroelectric power plants.

With hydroelectricity we have a lot of problems, though we have done a very good job so far. But until we are able to use the waters of the Himalaya region and control the waters of the Ganges and Brahmaputra, which, in addition to financial problems also involves political problems with our neighbors Bangladesh and Nepal, we can't increase hydroelectricity beyond a certain limit. For the foreseeable future, our basic power enlargement will be in the thermal areas, backed by nuclear power plants.

**EIR:** As you probably know, the steel industry in Europe and the United States is presently regarded as a "sunset" industry.

**Samarapungavan:** Certainly not in India, and not in the developing sector. India still consists of 700,000 villages,

where 80 percent of the population lives. As we industrialize, we have to take care that steel goes into developing and stimulating those areas, which will substantially increase the purchasing power of that 80 percent of the population. Therefore we cannot expect miracles; we cannot expect that we will jump from today's situation of 14 kilograms of finished steel or 17 kilograms of crude steel per capita per year to something like 500 kilograms. But steelmaking has to grow, and most of it has to be done within our country.

First of all, we are a very large country, we just cannot afford to be dependent on outside sources for such an essential commodity. Second, we have plenty of iron ore resources, and third, we have a very old tradition of steel making, as the 1,500 year-old rust-free Iron Pillar here in Delhi proves. We were among the first to pick it up from the Hittites in Anatolia, and it has spread during 3,500 years.

With this tradition and the raw materials, this country's economy and its basic security should not depend on imports. The question of not developing steel in India does not arise, even if we import steel for a temporary period at dumping prices from abroad.

**EIR:** The Non-Aligned summit here in New Delhi came up with a very remarkable and constructive economic and political resolution to pursue financial restructuring internationally—in order to promote industrial development of the "South." Have your plans for expansion and economic development here in India been enhanced by this?

**Samarapungavan:** Certainly! And, I would say, they *have* to be enhanced. Basically, most of our expansion projects are for the domestic economy, but, in the larger sense of technology transfer, the transfer of our experiences to other developing countries, we already have a lot to contribute, and many of our friends in Africa and elsewhere are already making use of this. There are certain basic differences between the type of development we are carrying out today in India and a new plant being built in Germany, the United States, or Japan. Our experiences will be more relevant to a similar country, where the industrial infrastructure still has to be built up. This cooperation was definitely enhanced by the conference.

Secondly, the summit has brought out a very important issue, which, if it is not reckoned with, will be a grave peril to world politics. Throughout human history, nations have only progressed domestically when the purchasing power of the bulk of their people could be enhanced, i.e., when the expansion of the entire population gave a stimulus to growth; this happened in Europe, in the United States, everywhere. This applies also in terms of the world market. If the purchasing power of the developing countries cannot be stimulated, it will not only hurt the developing countries, but also the developed countries, because the development of the entire world will be affected negatively, and that in turn will affect the economic development of the industrialized countries.

There has to be a certain complementarity in the world economy. In India, we are finding that you cannot have urbanization without the development of the rural areas. It just makes no sense. Similarly, on a world scale, you cannot have further progress if the disparities go on growing. It won't work. The point was brought out very well at the conference that there has to be joint thinking internationally in order to stimulate commerce and industry all over the world.

I have found one thing, that people in industry everywhere think alike, in the North, South, East, or West. If you get accustomed to the needs of industry, you start developing the kind of thinking industry demands, and that kind of thinking creates a certain pattern, which transcends everything else. . . . I wish Godspeed to the other industrialists in the rest of the world, particularly to my brothers in the steel industry. I wish them early recovery from the present distress.

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## Interview: V. Subramony

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# 'Rourkela has helped develop the region'

*Rourkela Steel managing director V. Subramony is an expert in blast furnaces. He had 22 years of technical experience at Bhilai Steel Plant before he became technical director at SAIL headquarters in Delhi in 1978. The interview was conducted by Hartmut and Ortrun Cramer on March 22.*

**EIR:** We would like to discuss the role Rourkela Steel Plant has played in the development of the Indian economy and in this area.

**Subramony:** It has fulfilled three important tasks. First, it has been playing its important role in providing the much-needed flat products like sheets and plates. . . . [Secondly] Rourkela adopted the LD converter [basic oxygen] process, a modern technology which gave us the opportunity to develop cadre and train people here.

Thirdly, it contributed to the development of the whole area. This plant is located in Orissa state, one of the poorest states in India. Most of our employees come from the local region, particularly peasants, members of tribal groups, and underprivileged people. Rourkela has given a great push to the development of the area, and it also helped to develop a good number of ancillary industries in the area.

We have built peripheral development projects, which in addition to improving the life of the people in the steel town, have also helped in building infrastructure—like pumps and irrigation systems—as well as some schools and cattle and poultry farms. We have given a great boost to the cultural and educational development of the population. We go around the area and talk to the people once a week and offer our help.

We have more such plans in hand, which we want to accelerate. . . .

We have worked out a modernization plan for the steel facilities, and with this we also would like to make some changes in the design limitations, since the plant is over 20 years old. We want to replace certain old units, add one or two mills for enriching our product mix in order to make higher value items, and we also want to slightly expand the plant from the present 1.8-million-ton capacity to 2.5 million tons of steel per year.

**EIR:** The German-Indian collaboration which built Rourkela Steel Plant—did this stop or is it continuing?

**Subramony:** It's continuing. The first expansion from 1 million to 1.8 million ton capacity was carried out by our own design organization, but the equipment was provided by Germany. For the present modernization phase, we also have had discussions with German industries for quite some time.

They proposed to send a team of German consultants to Rourkela to study the need for modernization. But we felt that the exact needs, limitations, bottlenecks, and difficulties would be known better to people who are already working in the plant. We are keeping in touch with the German industries and our manufacturers there. Right now, we are buying a lot of spare parts from them.

The main problem for the modernization plan will be financing. The supply of equipment will depend on that. This has still to be finalized, but we hope to reach an agreement shortly.

**EIR:** In West Germany, it is sometimes said that Rourkela was not a success, since there have been many problems. This argument is used, by people from the Club of Rome or Brandt Commission, to demand an end to all big development projects. The steel plant and the beautiful town of Rourkela show that this argument is nonsense. But what have been the problems here objectively?

**Subramony:** A steel plant's performance depends to a great extent on the design and the quality of the equipment. It also depends to a great extent on the raw material base, the cultural level of the workers, and the organization of production. In the 1950s we set up three steel plants at the same time, one with the collaboration of the British at Durgapur, one with West Germany in Rourkela, and one with the Russians in Bhilai. Obviously, there has been a lot of keen observation of what was happening in the three plants. It is a fact that Bhilai had done much better than the other two plants.

There have been certain setbacks for this plant; sometimes it was considered to be in quite serious trouble after the completion of the 1.8 million ton capacity in 1966. But then production started picking up. Looking back, looking at the concepts of design, I am not wrong in saying that there were some inherent weaknesses in this plant. Compared to other steel plants in this country, it has got a very poor raw material base. Coal, of course, is a problem for all the steel plants,