

TRIBUTES TO ENGINEER **STATESMAN**

BHARAT RATNA SIR MOKSHAGUNDAM VISVESVARAYA



On occasion of Engineer's Day
AKHIL BHARATIYA VIDYARTHI PARISHAD
MAHARASHTRA

Tributes to Engineer - Statesman, Bharat Ratna Sir Mokshagundam Visvesvaraya

This happened some years ago in the United States of America. Some Indians stood at the foot of a seventy-five-foot ladder in a factory. They were visiting important factories in the States to study their working.

Officers of the factory were with them, explaining how the factory worked. In one part of the factory, the officer said, "If you want to see how this machine works, you will have to climb to the top."

That meant that they had to climb up the seventy-five-foot ladder, past four storey's.

The leader of the Indian team was 85. "Very well, let us climb," he said.

The others were very much surprised. He was the oldest of them all; most of them trembled at the thought of climbing up the steel ladder.

The old gentleman briskly stepped towards the ladder, and started to climb. Many of the others stayed back. A few followed as a matter of duty. but some of them soon gave it up. The old gentleman reached the top, completed the inspection and briskly climbed down. Only three others completed the feat.

It was always so with the old gentleman - anything undertook he did systematically and very well. No difficulty, no danger could keep him back.

He was Doctor Sri M. Visvesvaraya - or, Sir M.V., as he was popularly known. Mysore (Karnataka), in South India, has made great progress.

The Krishnarajasagara Dam - or KRS or Brindavana, as it is also called - has amazed and enchanted thousands of visitors from all countries. It is one of the biggest dams in India. It waters a hundred and twenty thousand acres of land. It supplies electricity to hundreds of towns and villages.

The Bhadravati Iron and Steel Works is today an asset to India.

The sandal oil and the sandal soap of Mysore are famous all over the world. The Mysore Sandal Oil Factory and the Mysore Soap Factory export sandal oil and sandal soap to many countries.

Mysore University is one of the oldest in India. The State Bank of Mysore (it was first named the Bank of Mysore) has branches, not only all over Karnataka, but also in every big city in India.

The man who gave even one of these would deserve admiration and gratitude.

But all these were the gifts of one man - and he gave these to country about fifty-five years ago, when it was still not free and when few people here cared to study science.

This great man, this worker of miracles, this Bhagiratha of Karnataka, this Bharat Ratna (the Gem of India) was Sri M.V.

The Struggle for Education

Visvesvaraya was born in Muddenahalli in the Chikkaballapur Taluk of Kolar District (Mysore State), on the 15th of September, 1861. His father was Srinivasa Sastry, his mother Venkachamma. The father was a scholar in Sanskrit. The parents were good pious folk. Visvesvaraya learnt from them respect for the culture and the traditions of the land.

Visvesvaraya completed his early education in Chikkaballapur; then he came to Bangalore for higher education. He joined the Central College.

But his pocket was empty and he had no roof over his head!

A family from Coorg in South India was looking for a tutor for their children. Visvesvaraya, himself a student, became their tutor. He lived with them and also earned a few rupees. Later in life, Sir M.V. himself gave away more than a hundred thousand rupees to a Polytechnic Institute.

Discipline was ever Sri MV's watchword. Even as a young student, he worked hard and in a systematic way. He was an early riser and started his work quite

early. Everything about him was spick and span, everything regular and disciplined. So, he lived to the last day of his life - and he lived to be 101.

The poverty - stricken lad stood high in the B.A. examination in 1881. He got some help from the Government of Mysore and joined the Science College in Poona to study Engineering. In 1883 he ranked first in the L.C.E. and the F.C.E. Examinations (these were like the B.E. Examination of today).

As soon as the results were out, the Government of Bombay offered MV a post. He was appointed as an Assistant Engineer at Nasik.

The Builder of Fortune Begins as an Engineer

MV was only thirty-two. But some very difficult work fell to his lot. For instance, he had to find a way of supplying water from the river Sindhu to a town called Sukkur. He prepared a plan which many other engineers admired.

The Government appointed a Committee: it was to find ways of helping irrigation. Once again it was Visvesvaraya who found a solution. He devised a new system called the Block System. He devised steel doors; these could stop the wasteful flow of water in dams. Even British officers were full of praise for the invention.

Aden is a port; it is the first port as one travels from India and enters the Suez Canal. All around it there is a desert. Drinking water is hard to get. Sea water has to be distilled to get drinking water. MV prepared a plan to supply rain water from a place 60 miles away. In India, the lake near Kolhapur was damaged and the city was in danger. MV planned and executed the repairs.

From Bombay, Visvesvaraya went to Hyderabad as Chief Engineer. His great achievement in Hyderabad was the taming of the river Moosi. This river divides the city into two. In 1908 the river was in floods as never before. Visvesvaraya planned dams to tame both the Moosi and another river, the Isa. He also suggested that lovely parks should be laid out on the banks of the rivers. Even now visitors to Hyderabad can visit the dams and parks. Visvesvaraya was appointed as Chief Engineer in Mysore State.

As an engineer, Visvesvaraya did not interest himself only in buildings, roads and bridges. The people of India were then in a miserable condition. There were very few schools. Only six persons out of every hundred could read and write. There were no big factories, so it was difficult for people to get jobs; they had to get into government service, or else depend on agriculture and trade. A number of things had to be got from other countries. The farmer depended completely on the rains, if the rains failed hundreds of thousands of families had no food. Farmers followed very old methods of cultivation and used ancient tools. The average income of the average Indian was just one anna (that is six paise) a day! Many villages had no hospitals. In many parts of the country there were no good roads. Ignorance, poverty and sickness plagued the people. Visvesvaraya suggested that an Economic Conference be set up; it was to find ways of removing ignorance, poverty and sickness. We have already referred to the Krishnarajasagar Dam near Mysore. A lake of 50 square miles was created here. As a result, the very dry lands of Mandya District began to smile with plenty. When the dam was constructed India was not producing cement. Our engineers prepared mortar much stronger than cement. The dam also gave Mysore State plenty of electricity.

Visvesvaraya was the Chief Engineer of Mysore for three years.

In those days the Maharaja used to appoint the ministers, there used to be three ministers and the Chief Minister was called the Dewan. In 1912 the Maharaja chooses Visvesvaraya as his Dewan.

As the Dewan of Mysore – And Ideal Administrator

Soon after Visvesvaraya became the Dewan, one of his relatives went to him. He was a man whom MV liked and respected. He was in Government service. He wanted a higher post, that he would have given him another fifty rupees a month.

Visvesvaraya said 'No'.

But, as long as the relative was alive, he paid him a hundred rupees every month from his pocket.

As the Dewan he got a car from the Government for his use. He used the Government car for government work; for his private work he used his own car. He was such an honest man.

The Dewan would be neatly dressed and ready for work by seven in the morning. There was not a crease or a wrinkle anywhere on his clothes. He worked steadily and methodically till one in the afternoon. He was back to work at three. And till eight at night he was at his desk.

It is the duty of ministers to tour the state and meet the people and find out what they need, isn't it? MV had his own way of touring a district. Before the visit, officers were asked to send information about the district. Hundreds of questions had to be answered by different departments. They had also to explain the needs of the district. Then the Dewan went to the district. He held discussions with the officers and with members of the public. Then he took decisions. As soon as he returned to Bangalore every officer who was to do something got a letter, he told him what he was to do. So, the Dewan's visit was made most useful to the Government and to the people.

Every moment the Dewan practiced this principle - That his office was for the service of the people and not for his benefit.

Visvesvaraya believed in the value of education. The people of India are poor and suffer because they are not educated - that was his firm belief. So, he wanted a number of schools to be opened. When he became the Dewan in 1912 there were about 4,500 schools in Mysore State. In six years, about 6,500 new schools were opened. When he became the Dewan, there was not a single First Grade College (that is, a college having degree classes) for girls. He made the Maharani's College in Mysore a First Grade College. Colleges needed a University; in those days, colleges in Mysore State were under Madras University. Because of MV's firmness and fight, Mysore University comes into being. It was the first University in an Indian state governed by an Indian ruler. MV also made arrangements for the government to give scholarships to intelligent students to go to foreign countries for studies.

We often hear of unemployment; don't we? Some people do not get jobs and cannot earn a living. People should be given the education to earn a living - this was MV's feeling. So, an Agricultural School was started; here the students were taught modern methods of agriculture. An Engineering College also came into being. Industrial Schools were started in every district.

A country's industries should grow only then the country can prosper. Then there will be more jobs. The country will grow richer. It will not be necessary to get things from other countries. The country can sell its products to other countries. In the modern world, industry is the backbone of a country. Visvesvaraya knew this. He developed the existing industries. For example, he got experts in the silk industry from Italy and Japan; they helped the silk industry. When he was the Dewan many new industries came up. The Sandal Oil Factory, the Soap Factory, the Metals Factory, the Chrome Tanning Factory - all these he started. Of the many factories he started, the most important one is the Bhadravati Iron and Steel Works.

A list of the things that MV did as Dewan for the prosperity of Mysore will fill pages. How does a country prosper? Trade and industries must grow. But these need the help of banks. It was because of MV's suggestion that the Bank of Mysore came to be started. He helped it in every way. He also suggested that good hotels should be opened in Bangalore and in Mysore for visitors. He helped those who started such hotels. The railways were managed by the Central Government. Visvesvaraya brought the railway lines in Mysore State under the control of the State Government. He also got new lines laid.

MV did in six years what many others could not have done in sixty years. "Was he a magician?" one wonders.

The Retired Dewan has not a Moment's Leisure

In 1918 Sri MV retired voluntarily. People think retirement means rest. MV lived for 44 years after he retired from service. He was 101 when he died. Except the 1st few days when he was very weak, he gave himself out for the country.

Right from his boyhood days, Visvesvaraya was eager to learn new things, (when he was past one hundred, a relative was going to Madras; he asked MV, "What shall I bring you from Madras?" Said Sir MV, "Bring, good modern English Dictionary") As Dewan he had visited foreign land twice. After retirement he went abroad so many times, for some work or other. Wherever he went, he had a notebook and a pencil in his hand. He made notes of any new information and then - he had but one thought: how can this new knowledge help India? And when he was back, he had but one aim to carry out the new plans. How could he find time to think of personal matters?

Ten years after he retired from government service, floods in the Bhadra put a stop to the work in the Steel Factory in Bhadravati. It fell to Sir MV's lot to set things right. The General Manager of the factory, an American, said it would take at least six months to reopen the factory. Sir MV thought the period was too long. The officer was stubborn. Sri MV removed him. In a few days he got the factory going. Many officers in the factory belonged to other countries; naturally they were not as interested in the working of the factory as Indians. MV got a number of engineers of Mysore trained. In three years Mysoreans took the places of the foreigners.

It was MV's dream to start an Automobiles Factory and an Aircraft Factory in Mysore State. He worked in this direction from 1935. The Hindustan Aircraft Factory (now called the Hindustan Aeronautics) in Bangalore and the premier Automobile Factory in Bombay owe much to his efforts.

Suppose we make a list of all that Sir MV did for the country when he was in service; and another list of all that he did after he retired. Which list will be the longer? It is difficult to say.

The rivers of Orissa were frequently in floods; they caused a lot of trouble to the people. MV studied the problems and prepared a report. This report paved the way for the construction of the Hirakud and other huge dams. New Delhi is the capital of India; the Government wanted to develop it in a planned way and make it a beautiful city also. A committee was formed to advise the Government and Visvesvaraya did valuable work as a member.

We hear so much about Five - Year Plans. Building up a country also requires planning and preparation. It is said that the first country to plan in this way was Soviet Russia. Her first Five - Year Plan dates back to 1928. Eight years earlier - in 1920. MV had thought a good deal about planning and published a book, 'Reconstructing India'. In 1934 he wrote another book, 'Planned Economy for India'. Even at the age of 98, MV was writing books on planning.

Service of the country was this great man's 'tapas'. When he reached the age of 100, people all over India showered affection and respect on the Grand Old Man. The Government of India brought out a stamp in his honor.

Visvesvaraya passed away on the 14th of April 1962. He was 101.

Bharata Ratna (The Gem of India)

For some time, when the Bhadravati Factory was in trouble, he worked as the Chairman. At that time, the Government had not decided his salary. It took some years to do so. The Government owed him more than a hundred thousand rupees. But he did not touch a rupee even. He told the Government, "Start an institute where boys can learn some profession." The Institute was about to start work. The Government wanted to name it after Visvesvaraya. But he said, "Name it after the Maharaja of Mysore." This is the Sri Jayachamaraja Polytechnic Institute of Bangalore.

How many such selfless patriots do we have?

Free India honors great servants of the country every year by awarding titles. The highest of this award is 'Bharata Ratna'. In 1955 Visvesvaraya was made a 'Bharata Ratna', the Gem of India.

He was a gem of mankind itself.

His memory power was amazing just as his genius. Fifty years later, one day, there was a discussion on a river, and he referred to some details. Then he called a servant and pointing to a bookshelf, said, "Bring the three or four books in the middle of the third row." Then he opened one of them and pointed to the detail under discussion on one page. He was 96 or 97 when this happened.

He was never late by a minute and he never wasted a minute. Once a minister was late by three minutes; MV advised him to be punctual. A man should do any work he undertakes methodically - that was his firm faith. Every man should understand his responsibility and do his best - that was the essence of his teaching. He practiced this very honestly and there are hundreds of instances to show this. Quite often he had to make speeches. Because of his genius, experience and mellow wisdom people wanted to hear him. But whenever he had to make a speech, he would think about what he was going to say, write the speech, get it typed and weigh every word and revise it. He would remember important points. Once he visited the Primary School in his native village, Muddenahalli; he gave the teacher ten rupees and asked him to distribute sweets to the children. The

teacher said. "Please say a few words to the children, sir." MV spoke for five minutes and went away. But later he was unhappy because he had spoken without preparation. Some days later he prepared a speech and went to make and was carefully reading it!

In 1952 he went to Patna. He was to study a plan for a bridge across the Ganga. The sun was scorching and the heat unbearable. MV was 92. There were parts of the site to which he could not go by car. The Government had arranged to have him carried in a chair. MV did not use the chair, he got off the car and walked briskly. The Government had also arranged for his stay in the Guest House. He would have been comfortable there. But he stayed in the railway coach and went on with the work.

A hundred such instances of his discipline and devotion to work can be listed. He once said, "The curse of our country is laziness."

Visvesvaraya was dedicated to work. He was also a man of spotless honesty. We saw how, as the Dewan, he refused to favor a relative. In 1918 he decided to give up the Dewanship. He had to give the Maharaja his letter. He went to the palace in the Government car. He returned in his own car. Those were the days when people had to work by candle light. MV used, for official work, the stationery and the candles supplied by the Government, for his private work he used stationery and candles which he had bought. Once, one of his friends was advised rest after some illness. He wanted to spend a few days in Bangalore. MV was the Dewan. The friend wrote to him asking for a house for a few days. He thought the Dewan would give him a Government Guest House, free of rent. The Dewan gave him a Government House; but as long as the friend stayed there, the Dewan himself paid a rent of Rs. 250 a month.

MV had the courage of his convictions. He did what he thought was right and was not afraid of opposition. At every step he had to face opposition. The British, who were then the master here, opposed him. Many Mysoreans could not understand his greatness. He was a visionary; he could see what the country would need fifty years later, a hundred years later. But the short-sighted and small-minded men made fun of him. Some of the officers under him thought he was not practical and laughed at him.

MV also planned the KRS dam. The cost was estimated; it came to 25,300 thousand rupees. Officers of Mysore State were shocked and opposed the scheme. At last Visvesvaraya convinced the Mysore Government with his arguments and it agreed. A new difficulty arose. MV wanted the height to be 130 feet. The Government of India approved a height of only 80 feet. MV went ahead with a foundation for a dam 130 feet high. Later, the Central Government agreed with him. Many people made fun of him when he started the Bhadravati Steel Factory and called it a 'White Elephant'. Some officers did not manage it properly and the factory suffered heavy losses. Quite a few persons felt happy! But today it is an asset.

MV was the Maker of Modern Mysore. He wanted education to be spread. He wanted people to give up blind beliefs. He wanted the fullest use of science and technology. But he also knew that being modern did not mean giving up everything that was old and giving up our culture.

He was so modest. Even at the age of 95, he rose to receive a visitor; he got up again when the visitor was leaving. But he also knew that modesty did not mean pocketing insults. In the old Bombay Province, the rules did not permit an Indian to become the Chief Engineer. Only an Englishman could sit in the Chief Engineer's chair. So MV gave up his post in Bombay. The Dewan was the highest officer in Mysore State. He himself gave up that very high office. He had self-respect without arrogance.

Sir MV was a fearless patriot. Those were the days when the Englishman was the lord of India and wanted to be treated like a god. The Maharaja of Mysore used to hold a Durbar during the Dasehara. On the day of the European Durbar, the Europeans were given comfortable chairs but Indians were required to sit on the floor. MV went to the Durbar for the first time in 1910. The arrangements pained him. The next year he did not attend the Durbar. When the officers of the place made enquiries, he frankly gave the reason. Next year all - Europeans and Indians - were given chairs. A British officer wrote a letter to MV. He said that in the Maharaja's Durbar, he wanted a cushion to rest his feet because the chair was too high. MV got the legs of the chair shortened and wrote to him that the height had been reduced. In 1944, an association arranged a conference. Visvesvaraya was the Chairman of the association. The Governor of Berar, an Englishman, was to open the conference. (In those days the Governors were very powerful.) The conference was to discuss a resolution that India should have a national

government. The Governor said that the resolution should not be discussed. "Otherwise," he said, "I will not come." Sir MV said to his friends, "All right. Why wait for him? Let us go on with the conference."

MV gave thousands of families' food; he gave thousands and thousands of students' education. Tens of thousands of houses were brightened with electricity because of him. And he led the country to the path of progress.

The Bhadravati Steel Factory, Mysore University, Krishnarajasagara, the Bank of Mysore - every one of his creation was mighty and magnificent. But far mightier and far more magnificent was the Bharata Ratna, who was at once a matchless Dreamer and Doer.

He once said: "Remember, your work may be only to sweep a railway crossing, but it is your duty to keep it so clean that no other crossing in the world is as clean as yours."

AN ABLE ADMINISTRATOR AND ARDENT PATRIOT

Sir M Visvesvaraya was not merely a great engineer, an efficient administrator and an ardent patriot; but also, in spite of all his passion for facts and figures, for data and designs, a very human and likable person. He believed in cultivating serenity of mind. **Sir M Visvesvaraya** gave his four-point programme for the **National Reconstruction** of India;

- (i) Progressively harder work.**
- (ii) Periodically planned and disciplined work.**
- (iii) Increasingly efficient work; and**
- (iv) Courtesy towards fellow workers and servants.**

His entire philosophy of life may be summed up in one word - "**work.**"

In the words of Visvesvaraya, "The way to build a better Nation is to build better individuals. A successful nation is usually composed of citizens, the majority of whom are efficient, of good character and possess a reasonably high sense of duty. An individual who aspires to be trusted should have character."

Of him, it could truly be said that his has been a life of devoted service to the cause of the mother land and that no one has contributed so much to the progress

of the country in such diverse fields. Honors came to him from all quarters but those that conferred that honor were honoring themselves more than the great personality on whom such an honor was conferred.

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