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Eppawala controversy pits rights lobby vs PERC

By Dinushika Dissanayake

The Eppawala phosphate deposit has been the subject of much controversy regarding its development and exploitation rights since its discovery in 1971 by the Geological Surveys and Mines Bureau.

An attempt in 1998 to grant excavation rights to a foreign company was aborted due to massive public protests, which culminated in a Supreme Court ruling that the proposed project would be in contravention of the fundamental rights of the people.

Recently the Public Enterprise Reform Commission (PERC) issued a public advertisement calling for expressions of interest from investors to develop the Eppawala phosphate mine.

The move has once again triggered a debate and last week the Citizens Trust, a group promoting civil rights, with the participation of both eminent lawyers and scientists held a discussion on the implications of a fresh attempt to develop the site.

The thrust of the discussion was the responsible development of the deposit. The stance taken by the Citizens Trust is that the site should be developed involving the ideas of the scientific community so that the government will be able to look at not only the traditional methods of mining but also other methods which are more environmentally friendly. The Trust was also concerned that mining rights should be granted only to a company with a clean eco-friendly track record.

An issue of great concern was that the mine should not be used for export purposes since the phosphate deposits in the world are fast depleting. According to the National Science Foundation report made in 1998, the deposit found in Sri Lanka could be expected to last for 200 years if it is used to meet national needs only.

Further the U.S. Geological Survey based in Denver, Colorado has issued a warning that the known phosphate reserves in the world are expected to be fully depleted in 50 years and the remainder of the reserve base is expected to be depleted within the next 100 years.

It has been found that the 10 main phosphate-producing countries and their reserve bases possess about 90 percent of the world's phosphate reserves. "Based on current extraction rates and economic conditions in the 1990s, more than half these countries will have exceeded the life of their reserves in less than 20 years," said Professor H. Sriyananda, Professor of Electrical Engineering at the Open University, at the phosphate seminar quoting a Food and Agriculture Organization (FAO) report.

The PERC advertisement has called for investors to develop the deposit "for domestic and export markets, conforming to applicable laws". The implication of whether the development of the site for both the export and national market would result in a dramatic depletion of the deposit was also a topic of discussion at the meeting.

It was further discussed that the mining of the phosphate deposit on a large scale would result in many hazards to the environment. Situated 240 kilometres from Colombo and 130 kilometres from Trincomalee, Eppawala falls within the district of Anuradhapura, renowned for its ancient water reserves and cultural landmarks.

The National Science Foundation in its report to court in 1998 had suggested that it should be mandatory that the track record of any company that is given mining rights in Sri Lanka should be carefully scrutinised.

The proposed (1997) mining agree-



File picture of Eppawala residents' protest.

ment was to form a joint venture, simply called "the company," of which U.S. based IMC-Agrico was to control 65 percent, and the Japan-based Tomen Corporation, 25 percent. IMC-Agrico is a U.S. based firm whose phosphate mines in Florida and associated processing facilities in Louisiana have been the focus of severe criticism by environmentalists.

Professor Sriyananda emphasised the example of Nauru, an island which was rich with phosphate deposits at one time but which is now comparable to a waste land, with vegetation only to be found in the coastal regions. "The Naurians were once the second richest people in the world," said Prof. Sriyananda, "but they were recently declared bankrupt because of the excessive 'strip' mining of phosphate".

It was further discussed that as a result of the excessive mining on that island various health problems such as diabetes and cholesterol were linked with the stripping of all vegetation from the island for mining purposes. The scientists agreed that this may well be the fate of Sri Lanka if the mining is not undertaken in a responsible manner.

The buffer zone which surrounds the Eppawala phosphate deposit is 675 square kilometres of land surrounding the 56 square kilometres of the deposit. The Kala weva - Jaya ganga eco-system runs within the buffer zone, close to the deposit itself. Further, numerous tanks and ancient water reserves are situated within this area, causing serious concerns as to whether they will be polluted by mining activity within the area.

In a letter by the Pugwash scientists, which was quoted by D. L. O. Mendis, a civil engineer, the mining activity at Eppawala is described as involving "...

The Eppawala phosphate mining issue has once again surfaced after a string of protests some years ago by residents saw the government calling off the project in which a US-Japan joint venture was to mine and export the phosphate. Here is a report by a Sunday Times FT journalist looking at the issues being raised once again in the context of the PERC offer to invest in this deposit.

the imminent destruction of an ancient soil and water conservation ecosystem in the pursuit of short-term financial benefit, desired by the state."

Further, the damage that can occur to the relics of Sri Lanka's ancient civilization, which lie close to the phosphate deposit was also extensively discussed at the meeting.

Anuradhapura lies close to the Eppawala deposit site and Professor Sriyananda said that an appeal had been made by Pugwash to UNESCO to add the ancient Kalawewa-Jayaganga ecosystem to its list of protected sites.

Prof. Sriyananda also discussed the population shift, which may occur due to extensive mining and the social implications, which may result.

On a more legal note the conditions which must be met in granting excavations rights to a private company were extensively discussed by the lawyers present.

A Supreme Court decision in 2000 held that an initial attempt to form a joint venture with Freeport McMoran (which later was merged to IMC Agrico) and a Japanese company to mine the site was in contravention of the fundamental rights of the citizens of Sri Lanka.

It held that if the deposit is to be ex-

ploited, a comprehensive exploration and study of the deposit including its location, quantity and quality of appetite should be made by the Geological Mines Bureau in collaboration with the National Academy of Sciences of Sri Lanka and the National Science Foundation (NSF). It was also made mandatory that the results of such exploration should be published.

The Court held that any project promoter must obtain the approval of the Central Environmental Authority according to law, including compatibility with decisions of the superior courts of record of Sri Lanka.

R.K.W. Gunasekera, an eminent fundamental rights lawyer, explained that the judgement was a landmark decision in that the Supreme Court interpreted that not even policy decisions of the government can infringe on the people's rights. "Even if it is a policy decision it must be a reasonable and fair policy decision," he said.

Jagath Gunawardane, another environmental lawyer, said that the selling of the Eppawala phosphate deposit would be ultra vires the decision of the Supreme Court and may even amount to contempt of court if the stipulated conditions are not carried out.

The discussion also included the

profit factor that the government would look at if the excavation rights were handed over to a public-private partnership.

According to the 1997 agreement, which was aborted due to the Supreme Court ruling, the Sri Lankan government (GOSL) was to have received just 10 percent of the total value of the raw phosphate. Those present at the discussion last week agreed that this would be a minute share of the profits, which the private company would be able to make from the deposit.

Prof. Sriyananda quoted Philip W. Anderson, Nobel laureate physicist at Princeton and one of the leading theorists on superconductivity as saying that Anderson considers Eppawala as one of the most scientifically important and unreported stories in the world.

Speaking of the profit margin granted to the GOSL under the proposed consortium of 1997 Anderson had said that it compensated the locals on a "...typical Third World scale with a minute fraction of the profits - profits which hardly exist if one were to count the true cost of the project."

The final topic under discussion was the production of phosphate for domestic use. Currently Lanka Phosphate Ltd, a public company holds the excavation rights of the Eppawala phosphate mine.

LPL Chairman Dr. Chandana Udawatte told The Sunday Times FT that the company currently has exploration rights in 1700 hectares of land. Since the mining is on a very small scale, they do not consider a buffer zone.

Annually, Lanka Phosphate Limited (LPL) produces 45,000 tonnes of Eppawala Rock Phosphate (ERP) and High Grade Eppawala Rock Phosphate (HERP). Professor Sriyananda said that

the low solubility of these products makes it necessary for the government to import a large amount of the more soluble Triple Super Phosphate (TSP), Imported Rock Phosphate (IRP) and Di-ammonium Phosphate (DAP) at a huge cost.

Soluble phosphate such as TSP is used for the cultivation of paddy and vegetables while ERP and HERP are used for tea, rubber, and coconut.

The NSF in its report in 1998 has recommended that Single Super Phosphate (SSP) and Partially Acidulated Phosphate Rock (PAPR) should be produced in Sri Lanka to replace the more expensive TSP, which is currently being imported at a large cost to the government.

The PERC website estimated that LPL produces 40 percent of the total requirement in the country. Fertilizer for paddy, which amounts to 50 percent of the requirement is not fulfilled by LPL because it doesn't produce the more soluble forms of phosphate. It was agreed at the discussion that the mining of the deposit to meet domestic needs was both cost effective and desirable.

The scientists discussed the various methods by which the low soluble phosphate could be converted to a higher solubility. The direct application of phosphate to crops is a method which is currently being used by residents around Eppawala. This is done by mixing phosphate with peat or straw and then applying it directly to the crops.

Acidulation is another method by which the raw phosphate is converted into the more soluble forms such as Single Super Phosphate. Retired engineer D.L.O. Mendis said that Sri Lanka should look at the option of using sulphuric acid to dissolve the raw phosphate as is done by Chinese farmers.

"There seems to be a serious lack of awareness on the part of the administration of the scientific options available which will be environmentally friendly," he said.

The PERC website refers to the use of sulphuric acid to dissolve phosphate but also notes that it would not be cost effective to import it. Mendis said that a sulphuric acid plant existed in Sri Lanka 15 years ago and that possibility of producing it locally should be looked at rather than importing. He said that this option would be far more cost effective than other methods used to convert phosphate into a more soluble form.

Mendis also said that if the sulphuric acid could be made available to the farmers, they could manufacture their own soluble phosphate to be used in paddy cultivation. The PERC website further notes on the other hand that if soluble phosphate is to be manufactured in Sri Lanka, then TSP and Ammonia manufacturing plants would also have to be established locally.

LPL Chairman Dr. Udawatte said that currently they are exploring the possibility of producing Single Super Phosphate locally using acidulation. He said that since Sulphuric Acid is not available locally, they were importing it from India.

"We will be applying it on a research basis for the next three harvests," he said. The company has already produced five to 10 tonnes of the more soluble form of phosphate, which can be used for paddy cultivation as a substitute for the imported TSP. The discussion ended on the note that the public must be vigilant when it comes to the exploitation of natural resources whether by state or private entities. It was agreed that the option of litigation should be seen as the last resort to prevent public assets being flagrantly misused by authorities for short-term financial benefits.