

Sunday March 5, 2000

by A. Denis N. Fernando,
Fellow National Academy of
Sciences Consultant

Mr. Fernando is also the 1998 recipient of the Ananda Coomaraswamy Memorial Medal of the Geological Society of Sri Lanka for his exceptional contribution to the Geology of Sri Lanka

The folly of the Eppawala Project proposal

The apatite deposit at Eppawala contains not only phosphates but also other precious minerals and metals and was discovered in 1971 by Mr. Dulip Jayawardene of the Geological Survey Department when Mr. D. B. Pattiaratchi F.N.A.S. was its Director. Nearly 70 drill holes were made and core samples examined for its mineral and metal contents and its extent determined. As far as I am aware when I was Secretary of the Ministry of Minerals and Mineral Based Industries in 1991 no further core drill samples were taken and therefore its content and extent is tentative based on the 1971 drilling. It is estimated that the site proposed to be exploited covers an area of about 60 square kilometre mining area and

surrounded by a ten kilometre 'Buffer Zone' on all sides bringing the total potentially affected area in the Anuradhapura District to cover about 800 square miles. This would include the developed area of System H as well as the Jaya Ganga and the potential UNESCO World Heritage site. More land is earmarked for processing at the Trincomalee Harbour which would pay put for any development benefits for the exploitation of the vast area that is under our jurisdiction according to the Law of the Sea for which we require Harbour facilities.

As one who has been very closely associated with the Mahaweli Project for three decades, it would also be necessary to say a few words about the ancient and new settlements in this area, which is called System H under the Mahaweli Project.

The ancient paddy area has been cultivated for over one and a half millennia by the purana villages and is indicated in the Accelerated Mahaweli Programme Map of 1978. The existing paddy fields were provided with extra water for double cropping in 1976 with diversion of waters from the Mahaweli ganga through the Polgolla Ukuwala, Bowatenna trans basin tunnel and canal systems when Maithripala Senanayake was minister. With the Accelerated Mahaweli Programme the whole of System H was developed with new Townships, Schools, Hospitals, network of roads and further distribution canals for double cropping of paddy. Several billion rupees were invested by the Government utilising Govt

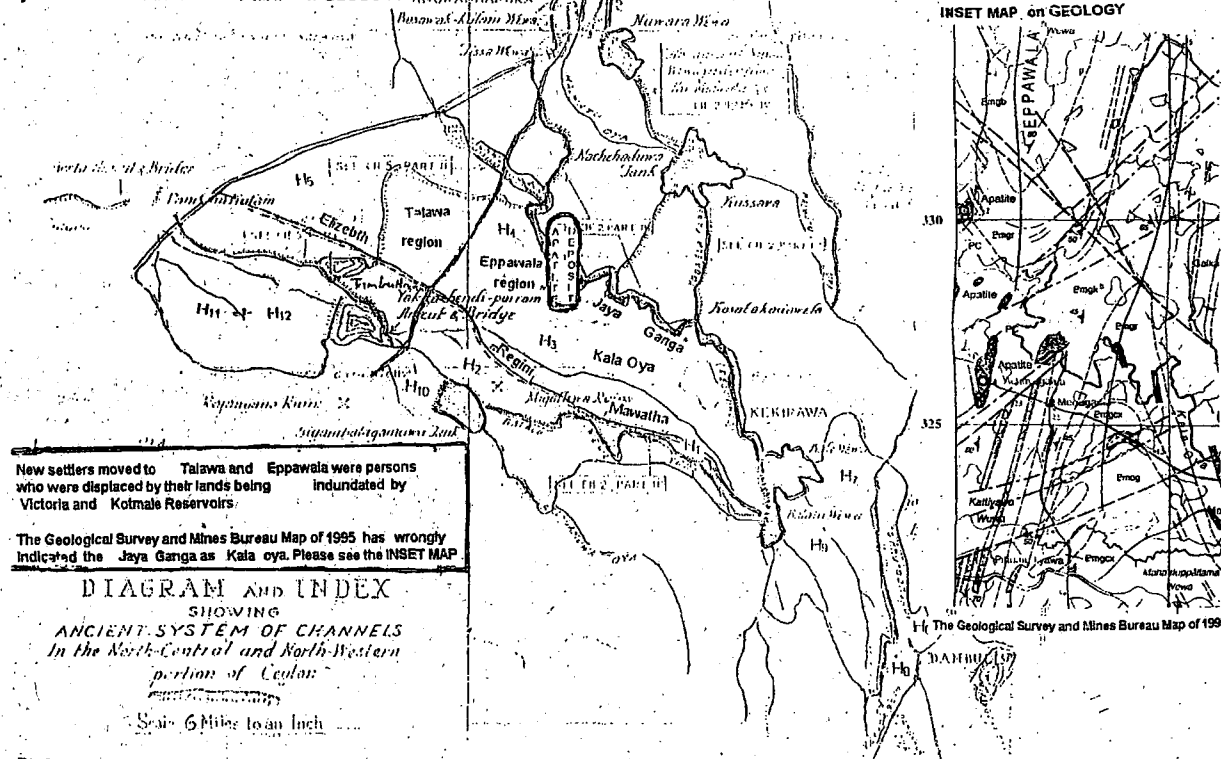
Funds and foreign loans in the time of Mr. Gamini Dissanayake. The Jaya Ganga continues to supply water from Kalawewa to the Sacred City of Anuradhapura. The purana villages of Eppawala and Talawa were firmly settled here in the rehabilitated areas of System H while the displaced Kandyan peasants who sacrificed their lands for the benefit of our country because their lands were inundated under the Victoria and Kotmale Reservoirs were given compensation in alternate lands in Systems H. This is indicated in map 1 together with the proposed Mining Site.

As a Development Planner with over four decades of experience, it is necessary to remind ourselves it is imperative for us to follow well known and accepted criteria project formulation before a project is accepted for

Dissanayake to save it as it is a unique artefact seen nowhere else in the world. He in turn convinced president J. R. Jayewardene who gave an order to save it. The Govt. spent 15 million rupees and constructed a tunnel to save it. Thus by their foresight the ancient and unique ancient sluice of Maduru Oya was saved for posterity. Unlike the Maduru oya Sluice which is a dead artefact, the Jaya Ganga is a living monument with a unique gradient of six inches to the mile that is yet functioning for the last one and a half millennia serving the peasants and delivering water to the Sacred City of Anuradhapura.

The question to ask is what measures have been planned to save the unique Jaya Ganga which is a masterpiece of engineering acclaimed by the entire world from destruc-

APATITE - PHOSPHATE MINING SITE AT EPPAWALA and indicating the UNIQUE ANCIENT HYDRAULIC SYSTEMS and the SETTLEMENTS under system H as well as an INSET MAP on GEOLOGY



By R.L. Brohier: System H Superimposed by A.D.N.F.

implementation as it has to satisfy the following criteria.

1. It must be technically sound and not adversely affect existing projects.
2. It must be economically feasible and subject to the laws of the land.
3. It must be socially desirable.
4. It has to be politically acceptable.

In respect of the above four criteria the project proposal for the mining project of Eppawala fails. It appears to be promoted by personalities who want to make a quick tuck.

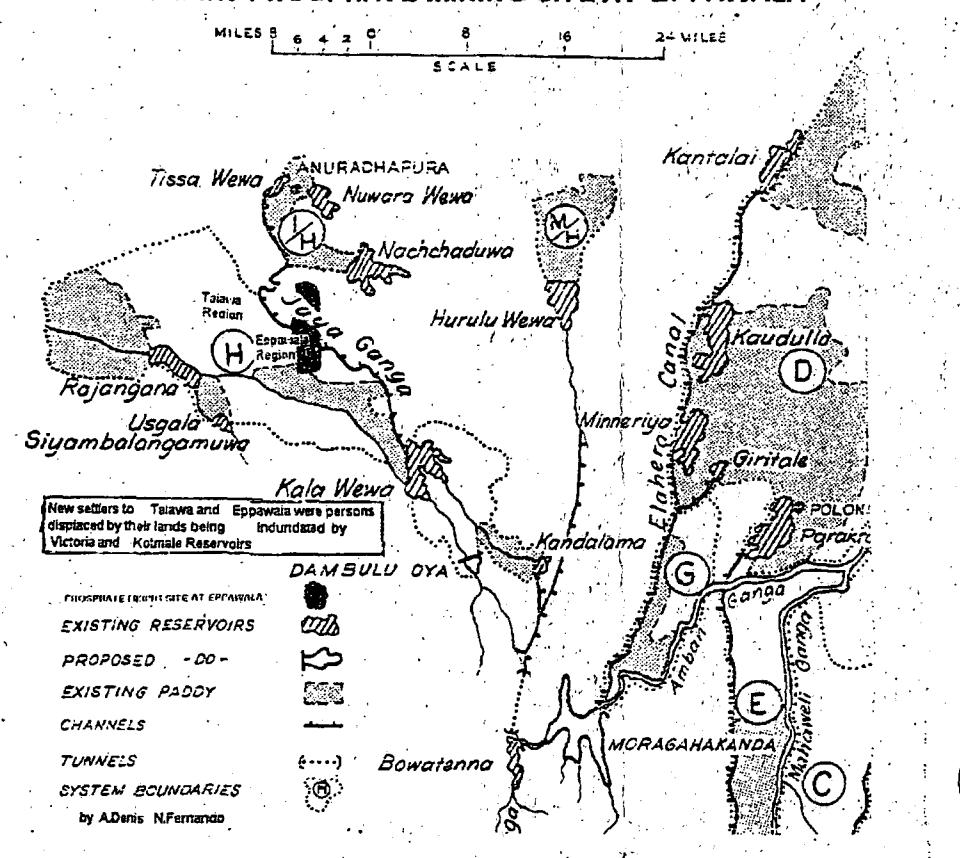
It would be relevant to indicate here that the unique upper sluice of the ancient Maduru Oya Dam, which I discovered is also unique in that the bricks of this ancient sluice was bonded together with resinous material making the sluice barrel water proof, in the manner the ancient Persians built them. When the Canadian contractors threatened to blast this ancient Sluice as it was interfering with their work, I had to plead with Mr. Gamini

if the mining projects is approved? Has the cost estimate or plan for, its conservation and use been even thought out by the proposed miners?

The Apatite deposit at Eppawala contains not only phosphates but also other rare minerals and metals and this deposit is proposed to be exhausted in a 30 year extraction programme. This number 30 reminds me of what happened two millennia ago when the traitor Judas Iscariot betrayed Jesus Christ for 30 pieces of silver, be that as it may.

It would be necessary to mention here the observation of Brohier based on Technical reports, that Jaya Ganga is just not another Transbasin canal transferring water from one basin to another; but which also functions to intercept the natural drainage system between Kalawewa and Anuradhapura. And therefore is not one that can be taken lightly as any disturbance would interfere and decrease the avail-

ACCELERATED MAHAWELI PROGRAMME and the PHOSPHATE MINING SITE AT EPPAWALA



ability of water to the Sacred City of Anuradhapura.

Map 2 Indicates the Apatite, Phosphate Mining site at Eppawala together with the unique ancient hydraulic systems in the area and the settlements under system H; as well as an inset map showing the Apatite deposits indicated in 1995 by the Geological Survey and Mines Bureau, who has wrongly indicated the Jaya Ganga as Kala Oya.

In this connection it would be necessary to bring to the notice of all whether we are in fact violating and compromising the UNESCO declaration Preservation of Monuments for which we are a signatory. This is specifically indicated in the UNESCO declaration in Articles 4 and 5, which are of significance and relevant to us namely

1. That the earth is inherited by us in the present generation only temporarily (Reminisces of the Address by the Red Indian Chief Seattle to the then American President)
2. That reasonable use be made of Natural Resources by the present generation, especially of non renewable resources.
3. That life is not prejudicial by the present generation through harmful modification to the eco-system
4. That Technical and Scientific progress does not harm life on earth.

The Scientists and Fellows of the National Academy of Sciences at the University of Peradeniya and the Institute of Fundamental Studies including Prof. C. B. Dissanayaka FNAS and Prof. Dahanayaka FNAS and others have done pioneering work to utilise the apatite for local fertiliser application using simple chemical process, with the objective of

prolonging the use of this natural resources for the benefit of our farmers.

Likewise we are fortunate that the Minister for Science and Technology Batty Weerakone is making every effort to prevent its unethical exploitation, but promoting its use for the benefit of the local agricultural community which is strongly supported by the scientific community

The whole of the peasant community supported by the religious dignitaries of different denominations are against this project to be

given to foreign entrepreneurs who would destroy the environment and the means of livelihood of the peasants.

There were in addition several protests against this project by concerned citizens, erudite scholars, former Ambassador to UNESCO and many others which appeared in the newspapers over 50 in number. Even court action against the proposed project has been lodged.

Today we have the Environmental Law that prevents the starting of a project without undergoing an Environment Impacts Assessment, which if not adhered to violates the very law of the country. The Attorney General the foremost Legal Advisor to the Government whose comments in regard to the Draft Agreement in his confidential document dated 7th May 1997 to the Ministry of Industrial Development under which this project is planned states "The above draft agreement has been examined, and it is recommended that changes be made in accordance with guidelines set out in Annexure. In addition amendments will also have to be made in relation to the issues identified below. The provision relating to environment protection and rehabilitation of the project areas do not adequately safeguard the interests of the Government of Sri Lanka. The Agreement should be made consistent with the provisions of the National Environment Act". So far as is known nothing has been done in this direction, are we to believe that the American Multinationals are above the Law of our Land?

The National Academy of Sciences of Sri Lanka has also submitted a detailed report in this regard objecting to the proposed Apatite/Phosphate Mining Project to Her Excellency the President as well.