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JOINT-VENTURES AMONGST DEVELOPING COUNTRIES

Case study of Paradeep Phosphates Limited in India

Introduction

There is increasing realisation amongst the developing countries to have closer interaction and cooperation in the development process, optimising the use of their own financial and material resources. The need for increasing emphasis on South-South cooperation arises from the fact that they have more or less similar socio-economic environments and in the past, the technologies and assistance obtained from the developed countries have made them more and more dependent on such countries in their endeavour to promote rapid growth and development of their own industrial economies. The concept of joint-ventures amongst developing countries has emerged from this compulsion to sustain accelerated growth while reducing dependence on industrialised countries.

The formulation and success of a joint venture between two or more developing countries depends on the following factors:

1. Availability of investible resources
2. Availability of raw materials
3. Sound industrial base and technical capability
4. Market potential for the product.

It is in this context that Paradeep Phosphates Limited was conceived and set up for production of phosphatic fertilizers as a joint-venture between India and Nauru.

Brief description of the two countries

1. Nauru

Nauru is a small island, with a total area of 22 square kilometers, in the sounth-Pacific near the Equator. The country has an elected Government with a President as the Head of the State and the Government. It is a volcanic island with a crust of coral pinnacles, the interfaces of which are filled with high quality rock phosphate. The existence of rock phosphate in the island was noticed in the early part of the century and significant mining of the mineral started since 1950s. The island had been an Australian Protectorate and became independent on January 31, 1968. The present population of the country is around 10,000. Phospahte covers more than 1/3rd of Nauru area and is the sole exportable of Nauru. At present, the level of mining of rock phosphate and its export is around 1.5 million tons per annum. There is no possibility of setting up a phosphatic fertilizer industry in view of there being no local requirement of fertilizers.

2.India

India is a large country in South Asia with a population of about 730 million, the 2nd highest after China. During the last four decades since independence, the population has increased to double and is still growing. It is projected to reach 1 billion by the turn of this

century with consequent growing requirement of food grains and other agricultural products. Even though it has achieved self-sufficiency, the foodgrain requirement is projected to increase by about 50% of the present level by 2000 AD. Due to shrinking land/man ratio, increasing productivity of the existing land under cultivation is extremely important and towards this end, the increasing use of fertilizers is one of the most important strategies. Thus, at the time of independence the consumption and the installed capacity was almost negligible at 66 thousand tons and 116 thousand tons of nutrients respectively. By 1986-87, the consumption has grown to around 8.722 million tons of nitrogen, phosphate and potash (N, P & K), while the installed capacity has increased to 6.76 million tons of N and 2.257 million tons of P respectively. The requirements of Potash are met entirely by imports there being no potash deposits in India and consequently no production possibility. By the year 2000 AD, the requirement of nutrients to sustain the foodgrain production targets is projected to be around 17.5 to 20 million tons. In so far as the requirement of phosphatic fertilizers is concerned, it is met by a fast developing industry based on local rock phosphate(of which the deposits are limited) and imported rock phosphate and sulphur or phosphoric acid. Besides, significant quantities of phosphatic fertilizers (Di ammonium Phosphate) are also imported to meet the shortfall between the demand and indigenous availability.

Thus, India offers a fast growing market for use of phosphatic fertilizers and consequently a growing industry based on indigenous/imported rock phosphate/sulphur or phosphoric acid.

Genesis of Paradeep Phosphate Limited

The Govt. of Nauru was keen on investing the substantial income from the export of rock phosphate, in profitable ventures. On account of their long association with Australia, considerable investment has been made by Nauru in that country. However, they considered it in their long term interest, to invest money in different ventures. This was one of the reasons chosen by Nauru to join hands in a joint venture in India. They had also chosen Philippines for a similar joint venture. When Nauru Government took the decision to diversify their investments and participate in a venture in India, they investigated various possibilities. In the early 1970s, they considered investment in a cooperative venture, namely, Indian Farmers Fertilizer Coop. Ltd (IFFCO). The intention was to join hands in the construction of a plant for production of Phosphoric acid. At that time, one of the reasons for promoting a Phos Acid plant was that it could provide a market for thier rock phosphate. However, the proposal did not materialise mainly due to non-availability of a suitable location near the phosphatic fertilizer plant of IFFCO which was to consume the Phos Acid produced in the joint venture.

The quest for a suitable investment opportunity continued, with emphasis on a project which will be using rock phosphate as the main raw material in production. In the early 1980s, a proposal by Govt. of India to build a phosphatic fertilizer complex at Paradeep materialised. Nauru considered it advantageous to participate in the setting up of the project primarily since it would be using rock phosphate as raw material and that in view of its location on the East-coast of India which is closer to Nauru, (compared to the earlier proposal of IFFCO which was to be set up at Kandla in the northern most major port on the West-coast in India) there could be substantial saving on freight.

India's consumption of P2O5 is a little over 2 million tons per annum. The indigenous production of rock phosphate, the raw material for production of phosphatic fertilizers is around 6 lakh tonnes per annum which is considered to be small in relation to needs. As such, the country has to import most of its requirements of P2O5. One of the ways of meeting P2O5 requirement is to import rock phosphate and convert it into phosphatic fertilizers, primarily DAP. The other alternatives are to import the intermediates - Phos. Acid and Ammonia and manufacture DAP within the country or import the entire P2O5

requirement in the form of finished products like DAP. It was felt that any single alternative in itself, would not be in the interest of the country.

After considerable study and taking a long term view, the Govt. of India adopted a policy whereby a judicious mix of the three alternatives was to be adopted to meet the P2O5 requirements of the country. The programme was to import about 1/3 of the requirements as finished products, 1/3 to be manufactured in India by importing the intermediates-Ammonia and Phos Acid-and the balance by indigenous production of Phos Acid and DAP, using the primary raw materials of rock phosphate and sulphur. This programme is being implemented to the extent practicable keeping in view the overall economics as well as the long term strategies to ensure timely supplies. It was in this context, that the Govt. of India decided to set up a phosphatic fertilizer complex at Paradeep where both intermediates as well as primary raw materials will be used for production of the finished product DAP. Since Nauru had some amount of financial reserves and one of the raw materials namely rock phosphate, it was considered possible to have a joint venture with them with mutual advantages.

Paradeep is located on the East Coast of the country and is a major port in the State of Orissa. The plant is located close to the port.

A Company with the name of Paradeep Phosphates Limited (PPL) was registered on 24.12.1981 with an Authorised Capital of Rs.1200.0 Million and a Managing Director was appointed on 15.1.1982. Subsequently, the Island Republic of Nauru entered into a Participation Agreement with India in which they were allowed 40% Equity participation. A small organisation with a nucleus staff was assembled and steps to acquire land in Musadiha Island were initiated as, earlier, some other companies like the Fertiliser Corporation of India and Madras Fertilizers Ltd had also chosen this site for their project. However, at this stage, it was found that the island is vulnerable to tidal waves and prone to be flooded easily during rainy season. Also, the project needed rationalisation to take advantage of economies of scale. A new site near the port was, therefore, identified. A fresh project report was prepared with revised scope of work and taking into account the needs of the new location. Also prices prevailing as on 1.1.1983 were taken for arriving at the estimates. Details of the revised proposal were:

Phase I	DAP Plant (4 streams)	2400 MT/day
	Offsites	As required
Phase II	Phosphoric Acid Plant (Single stream)	750 MT P2O5/day
	Sulphuric Acid Plant (2 streams)	2000 MT/day
	Captive Power Plant 2 x 16 MW	32 MW
	Storage for ammonia Phosphoric Acid, Rock Phosphate and Sulphur	Sufficient to receive large ships with freight saving
	Offsites	As required.

Phase I was completed as per schedule on 1.1.1986 and commissioned on 26.2.1986 within the scheduled date of 1.3.1986.

Phase II is progressing as per programme and is expected to be mechanically completed on the scheduled date of 1.1.1988. The total cost of the project is expected to stay within the estimates except for marginal increase on account of increase in the administered prices of steel and cement and increase in the exchange rates of Dollar, DM and Yen from the estimates used in 1982.

The company is managed by a Board of Directors which consists of 10 Members, 6 to be appointed by Government of India and 4 by Government of Nauru, including the Chairman and Managing Director who are appointed by the Government of India. The functional Directors, as and when they are appointed (at present there is no functional Director), would also be appointed by the Government of India.

In view of the importance of this joint-venture project, currently Secretary to the Department of Fertilisers, Government of India, is also the part time Chairman, while the President of Nauru himself is one of the Directors representing that country from the very beginning.

Raw material requirement:

Raw material requirement after completion of both the Phases will be as follows:

a) Ammonia	..	1,70,000 tpa
b) Rock Phosphate	..	7,70,000 tpa
c) Sulphur	..	2,20,000 tpa

Capital Cost of the Project

The original cost of the project, based on 1980 price level, was Rs.1836 million which was later on revised to Rs.3867.0 Million based on 1.1.1983 prices and the same date was fixed as Zero date for the 1st phase. Comparison of cost estimates - Originals based on 1.1.1981 prices and the Revised based on 1.1.1983 prices is as under:-

(Rupees in Million)

	Revised 1.1.83	Original 1.1.81
A. DAP Plant	660.483	452.700
B. Sulphuric Acid Plant	400.536	231.200
C. Phosphoric Acid Plant	479.695	273.800
D. Captive Power Plant	364.500	--
E. Material handling	551.082	184.100
F. Utility & Offsites	473.977	191.100
G. Land & Land Development	116.500	30.000
H. Township	145.800	88.000
I. Project Management and enabling works	121.700	30.000
	3314.273	1481.200
J. Contingency	139.927	64.500
K. Financing charges	168.100	46.700
L. Working Capital Margin	215.000	215.000
M. Commissioning expenditure	30.400	29.000
Grand total:	3867.700	1836.400
(Foreign exchange component)	418.4	260.8)

The revised cost estimates based on 1.1.1983 prices were prepared with no provision for forward escalation except for a ceiling of forward escalation of Rs.13 Million for the turnkey contract of DAP plant. The total expenditure till 30.6.86 is Rs.2652.4 million.

Procedure adopted in negotiating the joint-venture:

At the time PPL was proposed, Nauru already had entered into an agreement with Philippines for participation in Philippine Phosphate Fertilizer Corporation (PHILPHOS) plant in Layte island. As such, Nauru had the experience of negotiating joint ventures in the Asian region. Nauru considered their participation in PHILPHOS venture advantageous to them. They already had gained considerable experience in India while investigating the joint venture possibility with IFFCO. With the above background, they were already inclined to participate in a joint venture in India and invest some of their surplus funds. Govt. of India considered the long pending suggestion of Nauru for participation in a joint venture in India keeping in view the important aspect of South-South cooperation apart from the advantages of such a joint venture. While Nauru has one of the basic raw materials i.e. rock phosphate as also sufficient investible funds for equity participation in a Company, India has the market for Phosphatic fertilizers thereby offering enormous scope for exploitation of complimentarities to the mutual advantage of both the countries. Under the circumstances India had no reservations in joining hands with Nauru to set up a joint venture.

The President of Nauru had visited India several times. He also had informal meetings with the Prime Minister of India on more than one occasion. Over a period of time, the mutual trust was built up between

the two countries. Since the contacts were at the highest level, rapport was built up in a short time and that too on a firm basis.

One of the main reasons for the successful formulation and setting up of a joint venture between India and Nauru was that there was no area of conflict between the two countries, nor was there any previous history of any conflicts betweeen them. It was on a clean slate that the proposals were mooted. The two partners had one common interest and that was - the success of the joint venture.

However, as an Investor Nauru had an interest in deriving maximum benefit out of their investment while India had the interest of minimising foreign exchange out-flow on account of participation in the venture by Nauru. One of the interests of Nauru was to supply rock phosphate to the project and secure an attractive price for the supplies they would be making. This was in the interest of India since the project was to import large quantities of rock phosphate year after year during the entire life of the plant. Hence, it was necessary to procure rock phosphate at the lowest possible CIF price. In the import of rock phospahte, the freight is also a very significant consideration and distance of the source of supply from the country had to be taken into account. This matter was discussed in an amiable atmosphere and it was decided that supply of rock phosphate

by Nauru will not be a pre-condition for their participation in the joint venture and when the plant becomes operational, a decision would be taken regarding the source of supply of rock phosphate keeping in view the interests of the project. If Nauru finds it advantageous to supply rock phosphate at competitive price they will be able to do so. Otherwise rock phosphate will be procured from other most economic source(s) to ensure that cost of production in the plant is not high.

Another area where Nauru had specific interest was that they should be able to repatriate all the dividend due to them in hard currency and the Govt. of India agreed to the same. They also desired that there should not be double taxation though the Company will be taxed for the income it earns. This too was agreed to by the Govt. of India.

In general, both the partners could look at the proposal objectively and come to an equitable agreement whereby the interests of each were taken care of to their mutual satisfaction.

Further changes in the pattern of financing

Originally (in 1982) the agreement reached between the two governemnts was that Nauru will participate in the equity capital to the extent of 40%. In 1985, Nauru approached GOI for changes in the participation

agreement. Major changes they wanted in the participation agreement were (a) change of debt-equity ratio to 2.5 : 1 from the original plan of 1 : 1. It may be mentioned that the normal debt equity ratio for the public sector plants in India is 1 : 1 and the request of Nauru would have entailed a clear departure from the normal practice. (b) increase of Nauru contribution to equity from 40% to 49%. These changes were clearly in favour of Nauru and were rather difficult. However, after discussions, the GOI agreed to the proposition and amended the agreement showing considerable flexibility in their approach to joint ventures between Third World Countires.

The joint venture is still in its infancy and there had not been any occasion calling for serious discussions and changes in the approach to the operation of the joint venture. However, there are situations where the partners have differing aspirations regarding degree of participation in management, policies of the Company etc. These matters are always discussed in a cordial atmosphere and satisfactory solutions found.

Role of Governemnt Policies

The Government policies have a great impact on this joint venture which is being set up for production of fertilizers using imported raw materials. Also, fertilizer is a subsidised industry and its distribution is governed

under a special regulation - Essential Commodities Act (ECA). As such, the profitability of the fertiliser industry is governed not only by the efficient and high capacity production but by the policies of the government also. In fact, Government policies have a major impact on profitability etc. Currently, the consumer price of fertilizers is fixed by the Government of India at a reasonably low level to provide a suitable input/output ratio in relation to the procurement or market prices for foodgrains with a view to induce the farmers to increase usage of fertilizers, on the one hand, and protecting the interests of the consumers of foodgrains (about 40% of whom live below the subsistence level) on the other. At the same time, to ensure reasonable growth of the fertilizer industry to meet the increasing requirement, a reasonable return on investment has also to be ensured. The latter is achieved by fixation of a fair ex-factory price, known as Retention Price, for each unit and product besides distribution and transport costs by the Governemnt. The difference between the fair realisation and actual realisation is met by the Government as subsidy to the industry. Consequently, even in an environment of a strict control on price and distribution of fertilizers, the industry is assured of a reasonable return on investment.

CONCLUSIONS:

1. Joint venture can be organised with success between countries which do not have a history of disputes and mutual distrust, to put it positively, between countries where Government/people have respect and regard for each other. Where there is no conflicting commercial/political interests, the situation is ideal for such ventures.

2. If there is a significant commercial interest between the parties, i.e. one to sell and the other to buy the products involved in a joint venture, it is a healthy situation. In the relevant case, Nauru has rock phosphate to sell besides investible financial resources and India needs to buy the same. Although, this situation contributed only marginally in view of the fact that the delivered cost of Nauru rock could be higher than other sources of rock, the fact remains that the existence of an apparent mutual interest did act as a catalyst to initiate the project.

3. Even in a joint venture, certain conflicts of interest during negotiations, execution and operation can arise. For example, in the case under consideration, while Nauru would expect maximum return on its investment as well as a greater say in the execution/running of the project, India would like to minimise its outflow on a recurring basis either towards investment or purchase of rock phosphate. Further, since the industry is located in India, naturally it would like to have a greater say in the execution, and operation of the plant. It is gratifying that, given the goodwill on either side, such conflicts of interest were not allowed to surface and reasonable solutions found. The composition of the Board of Directors for management of the project ensured satisfactory

participation and control of both the sides. Nauru did not hesitate to give up its claim to supply rock phosphate for the project as one of the preconditions for its participation and, in the overall interest of the project, it was agreed that the issue of purchase of rock phosphate would be dealt with separately from time to time keeping in view the international price environment, so that neither Nauru suffers a loss vis-a-vis its export to other countries nor does India pay a higher price compared to other sources of rock phosphate. Further, when the cost of the project increased, India did not hesitate to allow a departure from the normal debt/equity ratio of 1 : 1 for public sector units as originally agreed to and changed it for this project to 2.5 : 1 so that the share of Nauru's investment does not increase significantly. This also enabled accommodating Nauru's desire to increase its share in equity from 40%, agreed to originally, to 49% later on.

4. The first phase of the project has been commissioned successfully on schedule and the second phase is also progressing satisfactorily indicating the continued efforts of both the sides to ensure the success of the joint venture. This project can serve as an appropriate model for permitting similar joint ventures between other developing countries.