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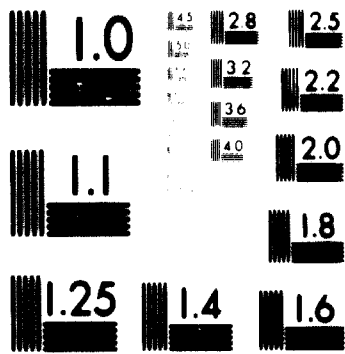
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1 OF 1



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

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The first part of the document
 discusses the importance of
 maintaining accurate records
 and the role of the
 various departments in
 ensuring that all
 necessary information is
 collected and analyzed
 in a timely and
 effective manner.



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ID/WG.259/20

United Nations Industrial Development Organization

**Technical Seminar on Contracting Methods and
Insurance Schemes for Fertilizer and Chemical
Process Industries**

Lahore, Pakistan, 25 - 29 November 1977

**CONTRACTING METHODS AND INSURANCE SCHEMES
FOR FERTILIZER**

Indonesia Country Paper

002587

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ID/WG.259/20

CONTRACTING METHODS AND INSURENCE SCHEMES FOR FERTILIZER

- 1 To make Indonesia self supporting in food production, this production particularly rice was one of the main objectives of the implementation of the first Five Year National Development Plan (1969/1970, - 1973/1974). The second Five Year Plan (1974/75-1978/79) also stresses the production of food as one of its basic aims.

The development of the fertilizer industry in Indonesia therefore has been given high priority for obvious reason.

Indonesia is well endowed with natural resources especially for nitrogeous fertilizer production, however as a more balance dosage nutrient is desirable, efforts are also directed to the production of other types of fertilizers. All the fertilizers plants, both existing and under construction are state owned.

This does not only reflect the importance of the fertilizer industry but now it also means that the Government has required valuable experience and know how to play a leading role in the development of the fertilizer industry in Indonesia.

2. The first fertilizer plant in Indonesia is the urea/fertilizer plant PUSRI I at Palembang, South Sumatra.

It was commissioned in 1963 and has since been operated close to or even above the design capacity of 100,000 MT/y of Urea. The feedstock is natural gas piped to the plant from the surrounding oil gas fields.

The first expansion of this plant was inaugurated in August 1974. It has a design capacity of 380,000 MT/y of urea based on natural gas feedstock. The current fourth stage extension of this plant with a capacity of 570,000 MT/y of Urea is scheduled to come on

stream at the end of 1977. This final stage of expansion will bring the plant's total producing capacity to 1.620.000 MT/y of urea. The third stage of expansion of similar size as the fourth was completed late in 1976.

The second fertilizer plant in Indonesia is the Petrokimia plant at Gresik, East Java, produces urea and ammonium sulphate fertilizers. It was commissioned in 1972 after a long delayed construction period. The urea unit can be operated on the "once through" or the partial recycle system and the output is 45.00 MT/y and 62.000 MT/y respectively.

Another 570.000 MT/y of Urea plant is under construction at Krawang, West Java and is scheduled for production starting at the end of 1978. Finally the Government has completed reviewing certain aspects of a urea and ammonia fertilizer plant in East Kalimantan, next to Badak natural gas field. Evaluation of a land based relocation of this initially conceived floating fertilizer plant has been made. Production capacity of 570.000 MT/y urea will be maintained.

Apart from the nitrogen fertilizer projects a phosphate fertilizer plant with plant capacity of 400.000 MT/y is under construction in Gresik, East Java. This plant is an extension of the Petrokimia plant.

These projects are expected to make Indonesia self sufficient in fertilizer by 1978, but with the lack in domestic use, selected fertilizer production is already being exported.

3. For a 570.000 MT/y of urea plant the project cost is approximately US \$ 250 million.

Part of the foreign currency component of the project are provided either by donor country government loan or International Finance Institutions/ IBRD Loan. The balance of funds required is being supplied by Government of the Republic of Indonesia and other sources.

4. Based on the experience gained in the operation of PUSRI I the same modification and improvements have been incorporated in the design of the other/fertilizer plants in Indonesia.

Since then the Kellong Process (USA) has been used for ammonia and the Mitsui Toatsu process (Japan) for urea, respectively Kellogg Overseas Corporation (USA) has been the contractor for engineering, design, procurement, construction, training, startup and other services for the ammonia plant utilities and offsites and Toyo Engineering Corporation (Japan) has acted as contractor for engineering, design, procurement, contracting advisory services and other services for the urea plant. The Legal Consultant being appointed for the current under construction West Java fertilizer plant is DeLeon and Gerson and as the Technical Advisor acts James Chemical Engineering (USA).

The type of contract have been reimbursable contract with lump sum fixed price for services.

5. The draft contracts usually prepared by the company concerned has a certain "standard content" according to the Company rule or rule of the country of the Company. For the negotiation of these contracts we have been assisted/advised by the consultants concerned appointed to us.

Notwithstanding our success in the development of nitrogen fertilizers - until the end of December 1977 export contracts have been signed for an amount of around 400,000 tons of urea with this procedure we feel we are lacking in expertise posed by the foreign contractors and consultants. We have not got much increase in the capability and ability to evaluate the Contractor's proposal. Very important is the back in the estimation of the cost of the project.

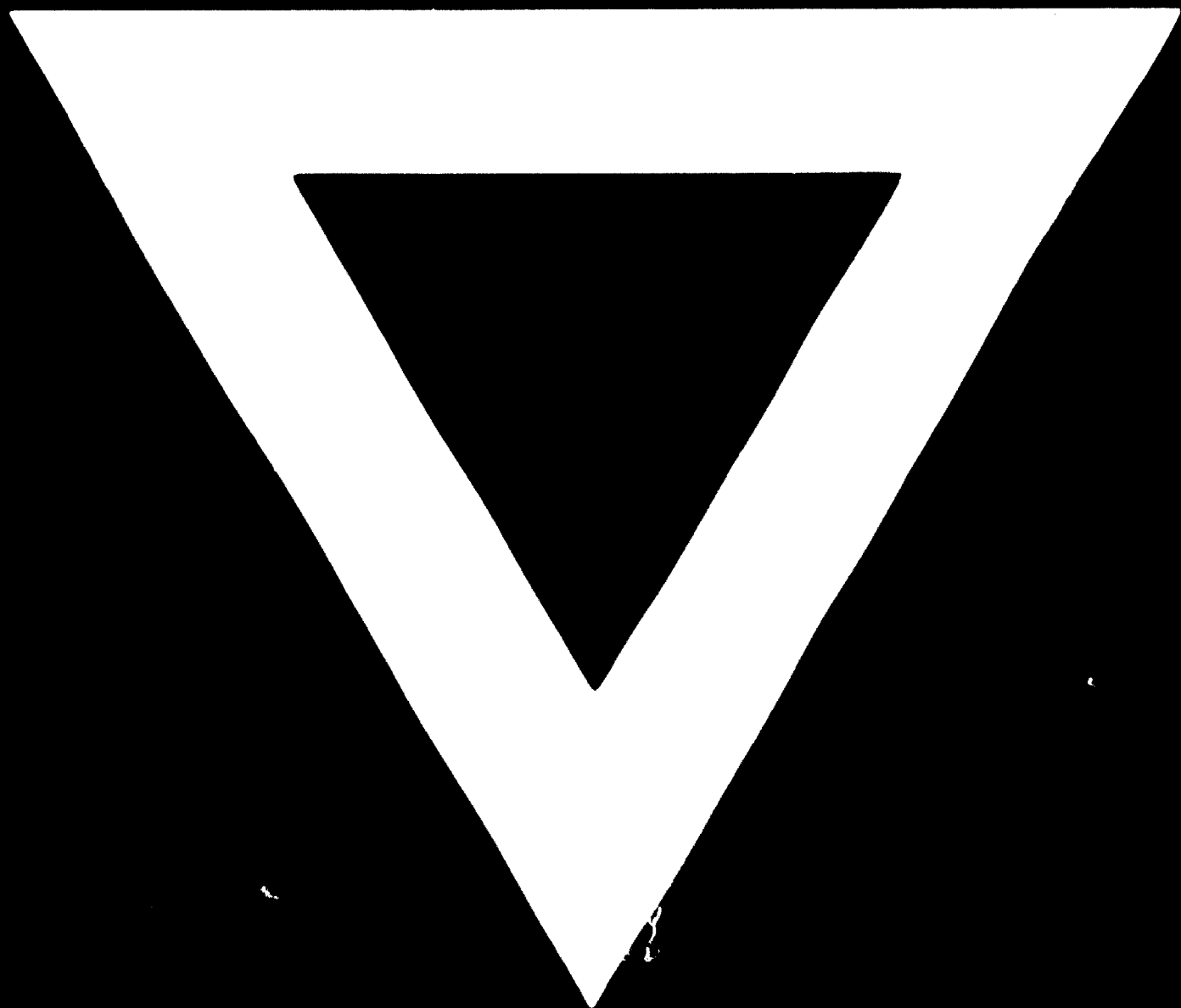
Other necessary knowledge in this contracting methods and insurance schemes are:

- evaluation of the various of engineering contracts - recommendation for selection. Mainly there are 3 types of contract - the advantages and disadvantages of each type.
- selection of a contractual scheme - factors to be taken into consideration.
- description of the services of the Technical Advisor - analysis of program of work to be undertaken for the implementation of the project (selection of contractors, evaluation of tenders, etc.).

6. Imposition of the expatriate local expenses are usually high and there for gives problems to the host country as for new projects (not operating yet) this part of the cost, has to be borne by the Government.

More opportunity should be given to the utilization of local materials and local lines (transport).

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82.06.23