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Expert Group Meeting on Fertilizer Plant Cost  
Reduction and Ways to Mobilize Financing  
Vienna, Austria, 11 - 14 April 1978  
*sufficient*

THE MOBILIZATION OF FINANCE FOR THE CONSTRUCTION OF  
FERTILIZER PLANTS IN THE DEVELOPING COUNTRIES

Summary of the argument and of the issues raised \*

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Summary of the argument and of the issues raised

i. Strategies for the mobilisation of finance for fertiliser plants may be considered in terms both of the financing required and of the types of finance available. A focus on the financing required raises the question whether the financing of fertiliser plants poses special problems, over and above the problems associated with large plants in general. Such problems may be seen as arising from the economies of scale associated with technological advance, which have complicated the issues for negotiation as well as raising the cost.

Q.1 In what respects, if any, are fertiliser plants a special case?

ii. Among issues for negotiation, the question of public or private ownership, which caused contention in the 1960s, has given way to seemingly more technical questions of project design. A major issue is the link between the timing of new project proposals and forecasts of world-wide supply. This and other issues which complicate the task of mobilising finance appear most acute in relation to projects with costs in the range \$100-500m. Financing of this order puts a premium on forms of financing which are additional to existing flows, and additionality may be an important criterion when comparing one source with another.

Q.2 To what extent are any special problems in the financing of fertiliser plants restricted to ammonia-based and other large complexes?

iii. Additionality in the crude sense of increased nominal flows is unlikely to be as significant as the range of variation in the true addition to the recipient's resources. The impact of different forms of financing on such factors as price, speed of negotiation and implementation, and reliability of start-up time, needs to be included in any assessment.

Q.3 How can additionality best be achieved?

Q.4 What forms of advisory support from international sources would be most effective in helping recipients to make a true assessment of additionality?

Q.5 Which qualitative factors are the most significant determinants of additionality, as measured in terms of the increase or decrease in the net present value of the resources deployed by the recipient?

iv. The most problematical element in the composition of costs appears to be the foreign component of the process units, ranging from 60 to 85 per cent of plant costs. Since the foreign component is relatively inflexible, finance restricted to the import component does not raise the problem of import-bias. Countries with significant domestic capacity in the construction of fertiliser plants are also likely to be countries in which local-cost financing is unlikely to be a dominant problem. The question is raised why the technique already familiar in mining projects,

drawin on commercial sources to finance the mining investment and development agencies to finance the associated infrastructure, is not more widely adopted in fertiliser plants.

- 4.6 Is there a significant problem of local cost financing?
- 4.7 Why is the technique of separating plant and infrastructure costs not more widely adopted?

v. Contractors in the fertiliser industry, with construction experience, tend to be separate from producers, with operating experience. Contractors increasingly operate on a fees-only basis, with no firm advance commitment on prices. In the case of plants financed by development agencies, lenders' rules may impede efficient procurement by the contractor, but plants financed from commercial sources may leave the borrower without adequate protection. The relative capacity of lenders to act as monitor of the recipient's interests is likely to have a more significant bearing on the true values of alternative forms of financing than marginal differences in the nominal cost of borrowing.

- Q.8 How much substance is there in complaints about development agencies' procedures as impediments to efficient implementation, and are these complaints sufficient to offset the safeguards that the procedures provide?
- Q.9 What steps will be most effective in protecting borrowers' interests under current practices in the construction and financing of fertiliser plants?

vi. A analysis of all official financing of fertiliser plants in developing countries by DAC countries and multilateral agencies in the period 1974-76 shows the World Bank in a dominant position. More impressionistic analysis of sample projects suggests that at present only official multilateral agencies are being used in a monitoring role. Other possibilities - such as greater use of consultants, or discriminating assessment of the proven experience of specialist commercial banks in project development and project finance - need to be considered, especially for projects in which multilateral agencies are not involved. Multilateral agencies, also, may be invited to consider whether their special position in relation to fertiliser plants calls for some modification of their standard rules.

- Q.10 What form should further analysis take, focused on patterns of financing of fertiliser plants from all sources, to supplement the coverage of existing reporting systems, which provide a sectoral break-down only for official flows?
- Q.11 Would such an analysis be useful as a model for a series of studies of financing in relation to other industries also?
- Q.12 Is there a case for modification of the standard procedures of multilateral agencies to take account of their special role in the financing of fertiliser plants?

vii. The bunching of loans for new fertiliser plants in 1975 has led to the widely predicted outcome of massively increased capacity coming on stream towards the bottom of a world cycle. The importance of timing suggests that in future speed and predictability of outcome may be important criteria in comparative assessment of sources of finance.

- Q.13 Is there a need for a more articulated policy statement from multilateral development agencies concerning the timing of new fertiliser plants, taking account of world supply forecasts?

viii. Analysis of the changing composition of financial flows to developing countries clearly identifies CIBO agencies and the Eurocurrency market as the most rapidly expanding sources of project finance. In the flow of concessional finance, there has been a marked shift to multilateral agencies. Fertiliser plants are unusual in the wide variety of types of finance they have attracted, even within a single country or in similar countries.

- Q.14 What is the significance of the changing composition of resource flows in relation to possible strategies for the financing of fertiliser plants?

ix. Criteria suggested for the assessment of sources of finance are: additionality; speed of negotiation; speed of procurement and disbursement; flexibility in the choice of process design; flexibility in procurement; avoidance of superimposed charges; provision of support in project development and the monitoring of contractors' performance; matching of grace periods and maturities to the project's requirements. Ranking of different sources in accordance with these criteria will depend on the weighting given to each. Six broad categories of finance are considered. On any plausible system of weighting, three categories - multilateral agencies, CIBO agencies, and the Eurocurrency market - emerge as preferred sources. There is no single category, however, which meets all the criteria.

- Q.15 What criteria should be used in comparing available sources of finance, and how should these criteria be weighted?
- Q.16 In the light of the criteria chosen, what are the advantages and disadvantages of the various sources of finance available?
- Q.17 To what extent could additional advisory services from international sources assist developing countries in their efforts to realise the advantages and avoid the disadvantages associated with different forms of finance?

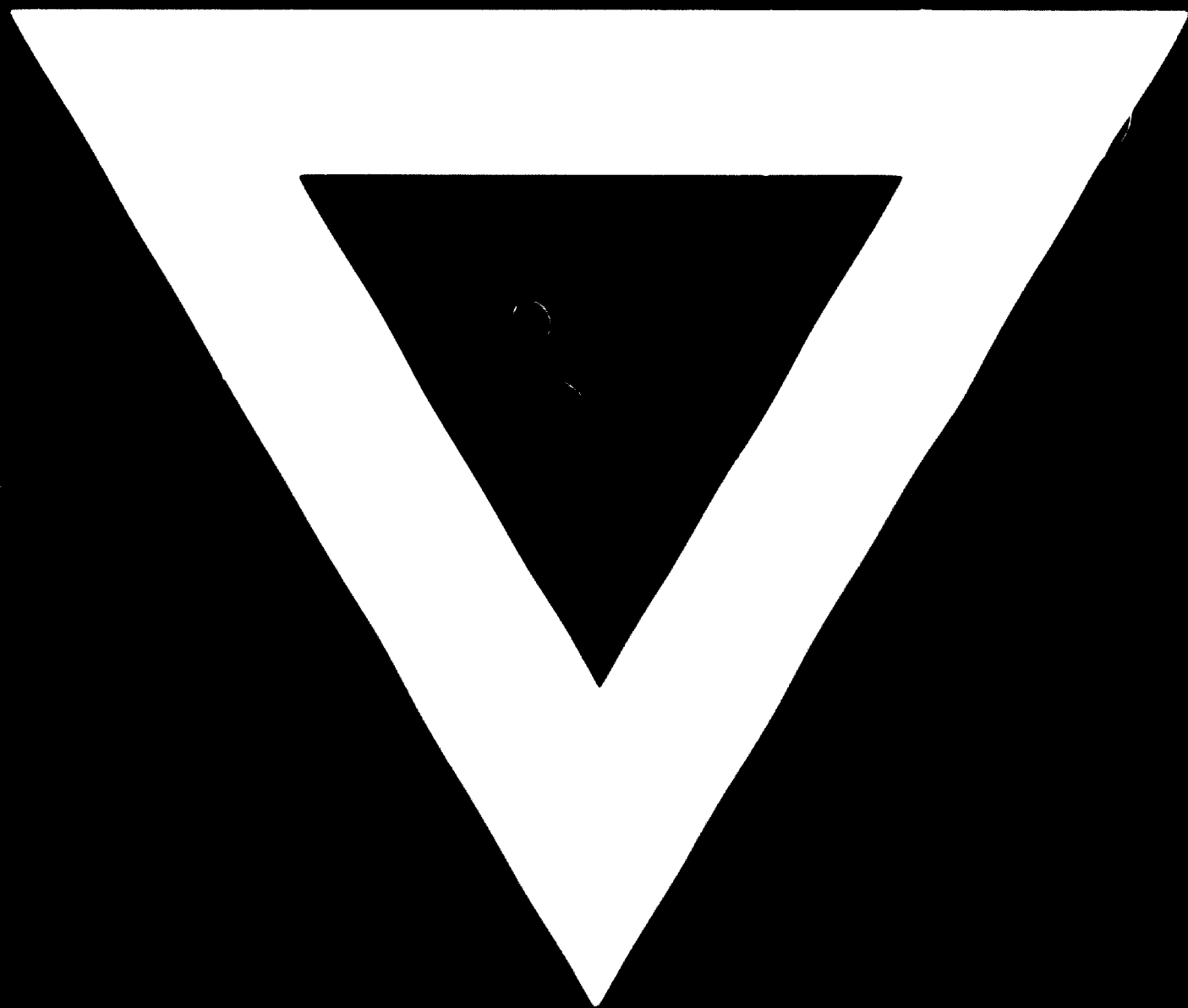
x. In patterns of co-financing typical in fertiliser projects, a trend is noted towards co-financing by like-minded institutions, as contrasted with a blending of finance from different types of source. While this may reduce the complexity of co-financing arrangements, it also reduces the advantages to be gained from blending, e.g. multilateral official finance with Eurocurrency lending. A trend is also noted towards parallel financing. This is attributed to co-lenders' reluctance to accept the insistence of the World Bank, as leading institution in this field, on uniform adoption of its own rules and procedures in joint financing arrangements, and to their desire to preserve institutional identity. The need for a fundamental re-thinking of the mechanics of co-financing, with special attention to the question why certain desirable forms of co-financing have proved difficult, and focused on the role of whatever institution takes the lead in co-financing arrangements, is presented as an urgent issue for discussion.

- Q.18 What is the trade-off between the advantages of simplicity and the advantages of blending in alternative forms of co-financing?
- Q.19 What should be the role of any institution taking the lead in co-financing arrangements, and does the performance of this role require special measures?

Note: DAC - Development Assistance Committee, OECD



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