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DIFFICULTIES ENCOUNTERED IN INVESTMENT
OPPORTUNITIES IDENTIFICATION IN LEAST DEVELOPED COUNTRIES:
WAYS AND MEANS OF IMPROVEMENT ^{1/}

by

C.G. Ludlam*

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* Director of Project Preparation Course, Bradford Project Centre, UK.

Introduction - the need for project identification.

Government involvement in the development of the industrial sector varies widely. Some limit their contribution to industrial development to the creation of an environment favourable for industrial growth, maintaining a constant and benign attitude toward the private inventor without participating in direct investment in industrial projects. Such governments may be content to exercise whatever control they need through legislation limiting the use of foreign exchange and labour, and through the use of price controls and licenses. At the other extreme is the government whose policy is to exercise control over every aspect of industrial development from planning the industrial structure to investing directly in every industry. In some instances this control extends to participation in management. Irrespective of the extent to which government policy requires direct participation in the industrial sector, there are a number of reasons why it is necessary for governments in the Least Developed Countries (LDCs) to monitor industrial development as an integral part of an overall development plan, and to participate in industrial opportunity surveys and other formal and informal methods of identifying industrial investment possibilities. Some countries have been successful in attracting private industrial investment with the minimum of positive action on the part of government, but eventually attempts to maintain the rate of growth or develop resources on a large scale requires contributions from the public sector. Planning the provision of infrastructure and services requires indications of industrial needs, so some degree of co-ordination is necessary between the industrial sector, whether private or not and the public sector. Urban planning is an example of this. Employment opportunities are needed for new communities, and the provision of services for industry in designated areas can reduce industrial costs and minimise problems of pollution and waste disposal for the community.

While some degree of co-ordination is necessary between the industrial and other sectors when industrial investment is easily attracted, there are many areas where commercially attractive opportunities are few or non-existent. Typically the domestic market is small, and resources few, but perhaps most important can be the lack of skilled and professional people capable of the entrepreneurial function of recognizing and exploiting investment opportunities. It is this situation which persuades the government into adopting the role of the entrepreneur. Project identification and

evaluation in other sectors of the economy can be justified by investments which improve or expand services or reduce costs. In the industrial sector the justification for investments depends on the vagaries of the market. Project identification can therefore be difficult, involving as it does an almost infinite variety of unrelated possibilities. In the smaller and poorer countries these possibilities are considerably restricted, but it is even more important that none should be overlooked.

Project Identification - methods.

An industrial opportunity survey provides the initial list of project possibilities. Checklists for doing this are provided by the IBRD and UNIDO, and other international agencies. The number of possibilities listed may be too large to examine in detail; nor is this necessary, because a brief profile or pre-feasibility study will indicate how seriously each case should be taken. One of the difficulties experienced at this preliminary stage is that investment ideas originate from so many informal and unpredictable sources, that it is frequently not recognised that there are systematic approaches to doing this. When attempts are made to compile a list, there is then uncertainty about the sources of basic data with which to prepare the pre-feasibility studies. This is when a source of industrial profiles can be useful, because they indicate for particular industries the types and proportions of inputs required at given levels of output. Profiles based on actual industrial examples are less useful than standard units, because conditions and requirements vary widely. This is perhaps one of the functions which the UN data bank would perform. The list requires frequent revision, and because it doesn't qualify as an urgent task it tends to be neglected. Changes in staff also disrupt the procedure. There is advantage to be gained from the separation of this kind of work from the routine administrative tasks with which most government offices are inundated.

Much of the work contributing to project identification in LDCs is carried out by the international agencies like the UNDP and the World Bank, which make surveys of sectoral needs in collaboration with government officials. As funding agencies they are also concerned to obtain estimates of external and internal finance available which must be matched to the amounts required to carry out existing and projects programmes. National

governments are expected to suggest the particular problems with which they need assistance, and the funding agencies have a responsibility to clarify the terms of reference for the suggested programmes. A difficulty here is that governments frequently are unable to identify their problems clearly and the extent to which projects, especially in the public sector, have effects which cross the boundaries of ministerial responsibility adds to the difficulty. These surveys are wide-ranging and may indicate the effects of a shift in policy, or the need for a change in approach to meeting development objectives. This is particularly relevant in the public sector, i.e. for public works, social services and agriculture, because they cover the whole of the country or at least large regional areas. Some of the larger consulting firms specialising in particular sectors like transportation are frequently engaged to make surveys, which may for example compare the relative efficiency of different transport modes. This is essential preliminary work which is both time-consuming and expensive, because it must cover wide geographical areas and examine the relationships between other equally wide-ranging economic activities. But while surveys of this kind provide valuable background data, they are intended to suggest broad lines of development. The results are frequently unclear, because they are comprehensive and the mass of material may be difficult to follow. This in itself can be an obstacle to their use in government, because no one has the time or the relevant expertise to understand them (and one then may become aware of the relatively less importance of the work to the government and question whether the study should have been undertaken at all). But this can be disappointing for the government department sponsoring such surveys, because they find that after waiting months or even years for the survey to be mounted with all the problems of obtaining budget allocations, lengthy negotiations over fixing terms of reference, and the selection of consultants, they are left with a mass of material which is only clear in what it fails to do, and that is to indicate what projects should be undertaken. For this a new study is recommended.

These surveys typically indicate bottlenecks and gaps in services which can provide the basis for pre-feasibility studies, but they also provide an essential background against which the opportunity studies can be made for industrial projects.

Industrial projects are concerned with specific products, which in turn require specific market data and specific combinations of inputs.

A survey of industrial opportunities would include information on relevant legislation, existing and proposed infrastructure and services, raw materials, and labour, and the costs. But it is not sufficient to know that rail transport is available at a cost of so much per ton compared to the cost of transport by road. One must also know how this cost will be applied to particular products, and the quality (reliability and flexibility) of the service. It is also not sufficient to know for example, that conditions are favourable for wheat growing, to be able to assume that resources exist to justify the construction of a flour mill. The fact that a flour mill had been constructed in a neighbouring country not more than 100 miles away was viewed enviously by farmers who believed that by constructing a flour mill they would secure a market for an expansion of wheat production. An investigation into the qualities and costs of wheat, and the market for flour in each country found that the quality of wheat was the same, but that the costs were affected in one case by a government subsidy, and that the flour produced by the flour mill could only be used to bake French bread, which was quite unacceptable to local tastes.

A resource survey recently carried out in Malaysia indicated that certain areas of the country were suitable for growing particular crops. From this it was estimated what the future output of these commodities could be, and this in turn was used to indicate the need for new processing industries. The survey was essentially correct, but it had not gone further to find and compare the yields and relative costs of similar commodities obtainable elsewhere. The latter were so superior that one suggested project did not survive the opportunity survey. The data obtained from sectoral and resource surveys and that accumulated in central planning offices loses in detail when aggregated for planning purposes. Input/output tables suffer from this characteristic and their use is therefore limited. Although they would appear to offer useful information on opportunities for intermediate products, most tables are so outdated by the time they are published that in a rapidly developing economy the guidance they can offer may have been overtaken by events. In other respects too they illustrate the difference between the information aggregated for planning and that required for project identification. There is no indication of the capacity utilization of industries nor the degree of competition. No indication can be given of relative price changes, and the opportunities for, or changes in, technical processes. Some of the categories for example relate to 'other food processors', and 'other manufacturing'. Once a country has reached the

stage when most of the import substitution industries have been established, the difficulties in using aggregate figures are increased and it becomes necessary to engage in detailed market studies.

Project opportunity studies need to have a background of economic data whether from surveys or from personal acquaintance with the area, and the analyst usually turns first to the domestic market for which data is most accessible, and which can be related to potential local suppliers. The data is obtained from the import figures which are usually reasonably up-to-date. There may be difficulty in identifying particular products from the product group, but this only matters if the value of the group of products is substantial, and if local resources appear to be available. A preliminary list of products can be made from the main import groups which may correspond to local resources, some of which are obvious, and some of which have to be investigated. Even in countries with a relatively advanced level of development, these figures can produce useful information. The trade figures are also a useful source of information on products which could be imported in a less finished state so that value can be added locally, by further manufacture or assembly. Similarly, products which are being exported unfinished or as raw material may offer opportunities for further processing. Fertilizer is an example of the first, and round logs an example of the second. Investment in the production of fertilizer is expensive, with minimum economic output levels too high for many countries. Similarly, the upgrading of round logs into plywood or paper, are capital intensive industries with increasing returns to scale and severe competition from big processors on world markets. An analysis of the domestic market for other products is more difficult. The performance of domestic industries may indicate that new entries into the industry may be possible, or the existing industries may be encouraged to expand. Industries supplying basic household needs should be encouraged to be competitive, and manufacturers of the first mass-produced luxuries to be purchased with higher incomes may be encouraged to expand to widen their market and obtain lower unit costs. Household income and expenditure figures are interesting in this respect, because future patterns of consumption may be indicated by comparing the different patterns of expenditure of the different income groups. It is difficult to anticipate all the possible project opportunities without making lists and checking them against domestic resources and markets, domestic and foreign, none of which may be obvious. The UN Standard Industrial Classification contains a large number of products many of which

are now described as footloose, because manufacturers are able to determine the most economic production locations which with low enough production costs (or incentives) can overcome transport costs. Interest then turns to countries with favourable investment climates and financial incentives, cheap and efficient services, and ready-made factories.

The search for new investment opportunities is a continuing operation because new opportunities may be added and others dropped with changes in incomes, prices and technology. When the pre-feasibility studies have been made, government may begin a search for sponsors, and use promotional offices not only in their own main towns, but also in foreign capitals, canvassing investment agencies and private investors. Whether the government decides to continue with a full feasibility study will depend largely on the response aroused by publication of the preliminary study, and its own intentions regarding participation. In some countries where the private sector is well-developed the government may consider a full feasibility study unnecessary, because the private investor or investment agency will prefer to make their own independent study. However, if there are problems with foreign exchange and unemployment which the government wishes to see reflected in the way the project is organised, then there is little alternative but to carry out its own study. If government participation is intended, then the obligation to make a full study is inescapable. It would be complacent to believe that all project possibilities from wherever they originate would be subjected to this procedure. Many ideas inevitably originate in political discussion, or as expressions of political and personal interest. If they represent clear political decisions, the task of the analyst is clearly to prepare studies illustrating the alternative methods and costs by which the required objective can be achieved. That is if he is requested to do so. However, the degree of personal discretion enjoyed by politicians and a lack of procedural controls can make officials very sensitive to what they believe are politically desirable propositions. Pressures, real and sometimes imaginary, result in commitments being undertaken without the prior advantage of adequate study; and studies being developed in a half-hearted way (or not at all) in the knowledge that a decision has already been taken at a higher level.

Administration and Organisation - difficulties.

The work which goes into the feasibility study can be considerable, and government departments cannot usually afford to allocate staff to studies unless they are reasonably sure that the analysis will make an effective contribution to decision-making. An administrative procedure which helps to ensure that only such studies are undertaken can substantially alleviate the difficulties arising from shortages of skilled staff. It is not surprising that many governments establish separate investment agencies to avoid this problem, and give them strict instructions to pursue only commercially viable projects.

There are several advantages in having a separate agency or department to handle industrial investment projects. It can be established like a Development Bank as a statutory corporation or a limited company, and be partly or wholly owned by government. It can follow guidelines laid down by government, avoiding investments in say, stores, offices, or drive-in cinemas, and be subject to a number of specific government controls. But the importance of having a separate institution is to have some degree of independence. A separate body has other advantages:

1. It can act with flexibility in its operations, and enter into financial partnerships with other enterprises;
2. It can pursue more flexible staffing policies, including the hiring of consultants and other short-term appointments;
3. It should have greater continuity and stability than is typical of government departments;
4. With clearly defined objectives its progress and efficiency can be checked.

The institution may be subject to political supervision and influence and control exercised by

1. policy direction,
2. controlling the membership of the Board and top executives;
3. budget allocations and restrictions.

It is unlikely that a government-owned institution functioning under

government policy can avoid some degree of government control, but more important is that it can avoid interference in its operations. But government representatives on the Board frequently fail to be adequately briefed when they attend meetings, and they are frequently travelling or have other urgent commitments, so that actual involvement in the affairs of the institution can depend on the personalities involved and the nature of the projects which come up for review. The chief executives should be appointed on merit and should have complete responsibility for the operations of the institution including the hiring and firing of staff and the level of remuneration to be paid. If approval for project investments is dependent on the Board, it should be possible for whoever is in attendance at scheduled Board meetings to make the necessary decisions.

If the institution is expected to invest in projects which are more economically viable, then this should be clearly indicated in its constitution, and provision made for financing these out of government funds. It frequently occurs that two such institutions are established, one with responsibility to support economically desirable projects, and the other committed to finance only commercially viable projects. The latter may be in a position to skim off the most profitable projects, and some agreement would be necessary between the two. There would appear to be a considerable degree of agreement about the usefulness of the government-owned investment agency because they have become very common.

The flexibility which they enjoy applies particularly to staffing. The work is multi-disciplinary and requires some industrial experience either technical or professional. It also requires some of the qualities of the entrepreneur. Considerable inducements should be available in terms of promotion opportunities and salary, and particular emphasis should be laid on mobility; not only travel overseas, but also to have access to information in government departments. A great deal of valuable time is lost and work duplicated by the failure of government officials to communicate with other departments, and there appears to be no inclination in some governments to remedy this. The difficulties to be encountered by the analyst who is responsible for completely unrelated industrial projects can be compared with what appears to be the extremely simple situation facing the private company when making decisions on capital investments.

Capital expenditures in the firm to large extent involve the repair and

extension of facilities, and originate with operating staff. Ideas for new developments are derived from the research and development department, and opportunities to expand into new markets or meet new competition from the marketing department. Traditionally, different industries expect rates of return on capital which relate to each particular industry, and some expect so much less than others that it is evident that there is a strong tendency for firms to invest directly in their own industries. The industrial conglomerate by comparison is more a predator; a trader in paper.

Ideas for capital expenditure are more likely to arise from the nature of an employees work than from intentional corporate design; small operational development from operating departments, and big projects from top management either individually or in committee. An incentive to promote new projects is likely to be the result of competitive pressures, both for the firm as a whole and for the individual employees.

Firms recognise that comparisons of investment proposals are best made if uniform methods of compiling, analysing and presenting data are adopted, and most large corporations will use a standard form and procedure for this purpose.

The screening of proposals may be a secondary function for those responsible, but there are specialists available who can assess the accuracy of the data and the reasonableness of the estimates. Consideration can be given to the tactical and strategic interests of the firm as a whole, and the proposals can be compared and ranked directly using the same criteria. The screening body is able to act as a collection point for data and to provide co-ordination between the interests of the different departments involved.

Most firms have some degree of delegation for investment decisions, based on departmental authority and the cost of the project. This ensures that decision-making is a continuous process, with only the biggest projects delayed for Board approval. This ensures that losses will not be incurred due to delays in decision-making where the cost involved is not significant. This procedure is most successful if layer projects can also be evaluated and decided upon without having to depend on periodic delays due to preparation of budgets.

The governments of the LDCs are inclined to accept a considerably greater range of responsibilities in the administration of their countries than they can effectively fulfil, and they are strongly encouraged to do this by well-wishers in the developed world who recognise the importance of government in planning development. But planning is complicated and requires not only large numbers of skilled people, but also to be effective demands efficient communication and co-ordination. External assistance frequently fails to make the hoped-for contribution because it is unable to come to terms with the massive deficiencies in local capability. When it is apparent to a lending agency that a government administration is inefficient, a study may be undertaken to provide advice on how it can be improved. The expert produces an excellent study to indicate how the administration should be organised, but the recommendations are never implemented because the government officials, while recognising the excellence of the study, cannot relate it to their patterns of behaviour. It is difficult to understand what the sponsors of the study could expect from it. In the six months that the expert works on it, he would never have had a chance to understand the people for whom his study was designed.

The government represents an important employer able to offer secure and well paid work for well educated young people. A large number are employed who have not worked for any other organisation. They struggle with the constant stream of administrative problems relating to the government's wide responsibilities, and are not prepared to respond to urgent problems requiring special expertise. If the urgency passes, the work can be dropped. If it persists, help is needed. A study may be the answer, and terms of reference are drawn up which cannot be too precise because the government official is not too sure what the problem really is. When the study is completed, the urgency to answer the problem may have passed so the study is again set aside for future reference. If the study is detailed and lengthy, and most try to be, at least in appearance, no one will read it because it will require serious application to understand the subject and take too much time. In government ministries in many countries there are numerous studies which not only have failed to be implemented, but which have never been read. Studies frequently fail to provide answers because either the question asked is inappropriate or because the terms of reference for the study are not sufficiently clearly defined. Consultants were requested to do a study to examine the need for storage facilities on the coast of Thailand. The request was made urgently because river barges

which normally brought commodities down from up-country were being stranded due to low water levels. While arrangements were being made to prepare the study the rains came and the barges floated off. The study was dropped. In fact, a serious problem existed due to the building of dams for irrigation which would continue to lower water levels. But the irrigation department responsible for the dams did not communicate with the Ministry of Communication, and the department responsible for highways had no contact with either.

Industrial project planning is a multi-disciplinary activity which not only requires some knowledge of a particular combination of subjects not taught in the universities, but also requires sufficient background in industry to appreciate industry's problems. This is necessary because much of the work will involve participation in negotiations with industrialists, and an understanding of their motivations, methods and objectives is important to achieve an agreement satisfactory to both sides; but also because the government official may find himself responsible for deciding the potential viability of an industrial project and for supervising its implementation and making it work. The government official is typically unprepared and may be quite unsuitable for this responsibility.

Although it is valuable to have a detailed methodology to ensure that nothing is overlooked, and that the appropriate degree of thoroughness is applied to the analysis, each project in some respects at least is unique. There must be some experience to allow for this. After making a substantial commitment in costs to the preparation of a feasible project, the benefits of the investment may be lost in a few minutes of negotiation. Once successfully implemented, the whole viability of the project may be destroyed by incompetent management. All or most of the calculations in a project will be based on estimates. How far they turn out to be accurate one may only guess; and the guesses are used to evaluate the risks. The entrepreneur has particular qualities which one cannot expect to find in government to any great extent. Some alternative qualities have to be found. It is not surprising therefore that there is a tendency to depend on the consultant. But the consultant may well be a specialist, lacking the breadth of experience to appreciate all aspects of the problem and not sufficiently well briefed to understand the special local criteria which should be employed.

Conclusions

The international agencies appear to have all the facilities already in the field to promote work in industrial project planning. An experienced industrial economist should either be included on the field staff or should make periodic visits to determine current needs.

Training

The inability of government departments to cope with the workload is indicative both of the overambitious objectives of government administrators and of the shortage of qualified and experienced staff, and emphasis should be placed on training. The problem which in many cases is sheer disorganisation is not one which can easily be improved by outsiders.

1. Some training in project work is essential, and this can be provided on short courses either locally or overseas. The courses should concentrate on the simplest and most practical techniques based on the methods described in the new Manual. This in itself should provide some indication to trainees of the need for efficient administration. There are several advantages in arranging to provide these courses locally; the most obvious are the greater numbers who can be trained, the lower cost, and the use of local case material.
2. Longer courses should be for professional qualifications in law, accounting and engineering. Postgraduate courses should in general be discouraged unless they are required for a specific purpose in industry.
3. The international organisations could perhaps give more attention to the training of school-leavers, by providing assistance for them to obtain professional apprenticeships which require practice in industry.
4. A number of overseas investment agencies with development objectives have offices in many of the LDCs, and although they recruit and train local staff, they may be persuaded to accept a greater responsibility for training, and accept trainees for secondment to their headquarters or to their offices in other parts of the world. Some

of these agencies have great experience in investment in the LDCs and are particularly strong in professional and management expertise.

Advisory Service

An industrial economist with project experience should be able to examine the circumstances where studies are needed. Where problems involve more than one ministry he would be in a position to obtain information from all concerned. Particularly important, he can analyse the terms of reference appropriate for the problem and help to set out the responsibilities of the staff or consultants who are selected for the work. He would also be in a position to determine the government's real interest in the problem and its capability of using the study when completed. Governments frequently negotiate studies with consultants and fail to keep their part of the agreement by

1. Failing to make data readily available
2. Failing to provide personnel and office facilities and transportation
3. Failing to provide counterpart staff. This is the most serious failure, because it may be an indication that the government does not attach importance to the work, or that it does not have the capability to follow through with the implementation. It also represents the loss of a vital training opportunity for staff to work with experts in the practical execution of their work. Unless adequate counterpart arrangements can be made the value of the study itself should be seriously questioned, because it would be reasonable to expect that the counterpart(s) would have responsibility for assisting in the implementation.

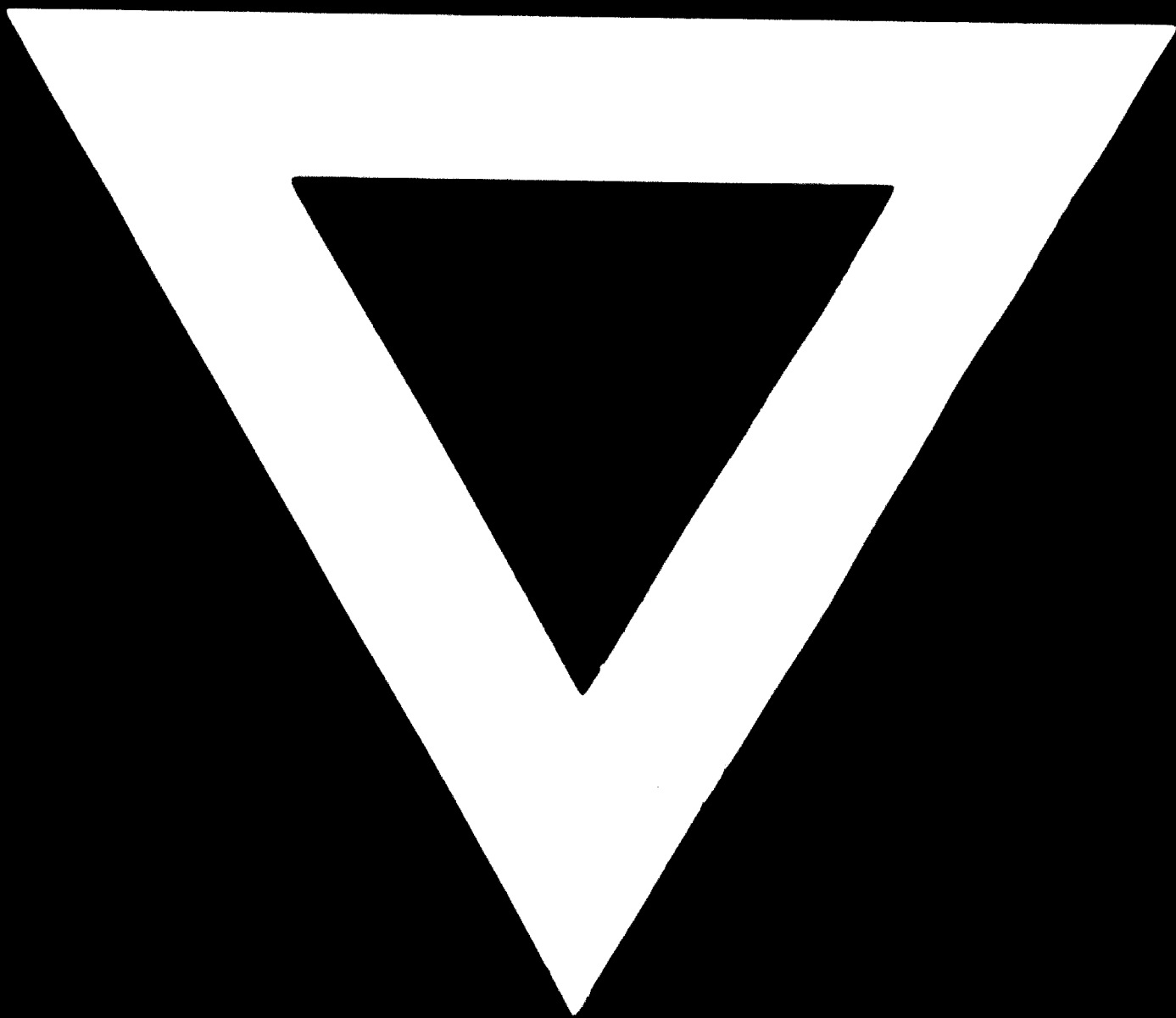
Where studies have been completed but not used, the adviser could be responsible for submitting reviews and recommendations concerning the contribution the studies can still make to continuing problems.

One of the significant features of the Manual is the way in which by elaborating a step-by-step approach to project studies, it illustrates the considerable amount of work required to fully assess the alternatives available for analysis at each stage in the study. These alternatives can only be analysed if comparable data is available, and the adviser could provide liaison with the proposed Information Bank to provide this informa-

tion. The Bank for example should be able to provide information on alternative technology, with an analysis of the inputs and efficiency, and the most appropriate circumstances for its use. In addition, it could provide a comparison of the terms on which it is available from international sources. This would not only prove valuable to the project analyst but would also be of interest to the planners involved in negotiating tied aid agreements.



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