

Training as a Component of the Consulting Contract

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A Report from the Conference on Environment and Development: The Future for Consulting Firms, December 7-8, 1982, Houston, Texas*

RICHARD A. CARPENTER** and JOHN A. DIXON***
*Environment and Policy Institute, East-West Center
Honolulu, Hawaii 96848, USA*

SUMMARY

Expatriate consultants are employed in developing countries to perform assessments of the consequences to natural resources and the environment of projects for economic development. Eventually (and as soon as possible) the developing countries must be able to do their own assessments and provide continual guidance to economic planning and management. The presence of foreign experts offers an opportunity to transfer technology and skills during the course of consultancies. A training component can be added with appropriate additional compensation. Some of the barriers to successful training are identified and explored. Careful planning by lenders, host country governments, consultants and trainers will be necessary to realize this potential for building and strengthening indigenous capabilities to wisely exploit and sustain the renewable natural resource base.

INTRODUCTION

In December 1982 the World Environment Center organized a two-day conference in Houston, Texas on the theme, "Environment and Development: The Future for Consulting Firms". Approximately 150 persons attended representing development assistance donor agencies, host countries, international consulting firms and academic/research institutions. The East-West Environment and Policy Institute (EAPI) was involved in the early planning of the conference and introduced the idea of inviting experts in environmental management from several developing countries in order to provide their authoritative insights to the practical problems of balancing conservation of resources and environmental concerns with development. The team authoring this brief report attended the conference under the auspices of the EAPI.

The conference agenda and discussions ranged widely and productively but an underlying theme emerged: the necessity that developing countries eventually (and as soon as possible) be able to do their own environmental assessments.

In discussing and pursuing this theme, the EAPI team met separately for a full day in Houston after the conference and most of the group reassembled in Honolulu the next week. This report was drafted by EAPI Research Associates Richard Carpenter and John Dixon on the basis of all these meetings. It reflects the consensus views of the group but the other individual participants should not be held responsible for narrative detail. There is more to be accomplished through multinational collaboration and the intent of this report is to set the stage for further thinking and action.

*The following experts from developing countries contributed substantially to this report: W. D. Ailapperuma (Sri Lanka), Herman Haeruman (Indonesia), Noki Makap (Papua New Guinea), Somvonk Poshyananda (Thailand), Suh Junghyun (Korea) and Veronica Villavicencio (Philippines).

**Richard A. Carpenter M.A., Organic Chemistry, University of Missouri, 1949. Came to EAPI from the National Academy of Sciences/National Research Council where he was executive director of the Commission on Natural Resources. Prior to establishing that office in 1972, was chief of the Environmental Policy Division of the Congressional Research Service, Library of Congress. Has contributed to the passage and implementation of legislation including the National Environmental Policy Act and has been responsible for a variety of studies interpreting and transferring technical information for decision-making. Began his career as a chemist and has obtained patents in the field.

***John A. Dixon Ph.D., Economics, Harvard University, 1977. B.A., Economics and Oriental Languages (Chinese), University of California at Berkeley, 1968. Previously worked for the Ford Foundation in Indonesia as agriculture programme economist where his main research interests were food policy analysis and natural resource management. At EAPI he is involved with environmental applications of benefit-cost analysis as well as economic aspects of the coal-fuel cycle.

Statement of the Problem

In all nations there are inherent conflicts between (a) immediate gains from economic development and (b) maintaining the renewable natural resource base so that exploitation can continue indefinitely in a sustainable manner. Project appraisal has been broadened to include special information gathering and analysis (natural systems assessment) to help make the required trade-offs and compromises as rational and well informed as possible. The difficult balancing of interests must be credible and acceptable to the resident society and various affected parties. Since there are many subjective judgments and weightings in development decision-making, the incorporation of local cultural, social and political values is essential, and these values can usually only be adequately represented by host country nationals. This logical sequence leads to the conclusion that indigenous capabilities for performing environmental assessment and implementing conservation measures in economic development must be established and strengthened in each country. Most international lending agencies have agreed to help in this task. On February 1, 1980 in New York, six of the largest multilateral development banks, following endorsement of the World Conservation Strategy, joined in a "Declaration of Environmental Policies and Procedures Relating to Economic Development". It stated, in part, that they would "provide technical assistance, including training, on environmental matters to developing countries, at their request, thus developing their indigenous capacity, and facilitating technical cooperation between developing countries". The Foreign Assistance Act (22 USC 2151 p. Sec 118) instructs the US Agency for International Development "to furnish assistance... for developing and strengthening the capacity of developing countries to protect and manage their environment and natural resources... [and] use local technical resources in preparing environmental impact statements and environmental assessments".

A variety of educational and in-service training approaches are underway in developing countries to build this cadre of assessors and managers. The task of transferring the necessary information, analytical techniques and conservation technology is enormous and will continue over many years. A rough survey by the EAPI of tropical developing countries indicates that about 10 000 professionals must be equipped with these skills in the next 10 years.

The presence of expatriate consultants in developing countries offers a good opportunity to build indigenous capability for environmental assess-

ment. The consulting contract may be for project appraisal including environmental factors or specifically for the preparation of a formal Environmental Impact Assessment (EIA). The contract may include direct training and counterparting, or only a secondary component related to training and technology transfer, or no specific reference but a vague expectation on the part of the borrower that some knowledge and skills are going to be imparted.

It is only forthright, and not critical, to recognize that the self-interest of the consulting firm is to preserve its exclusive competence—not to help create a rival in the host country. Thus, the question addressed in this report is how to motivate and reward consulting firms and the other actors in international economic development to build and strengthen indigenous capabilities for environmental assessment.

TRAINING AND CONSULTING FIRMS

Training and technology transfer will not happen automatically. The perceptions of the different parties involved vary as to their respective roles. There is even confusion about what constitutes training and what are the elements of environmental assessment. It is useful, therefore, to explicitly recognize these often conflicting expectations and points of view.

Definitions

Natural systems are the renewable natural resources, ecosystems and their environmental quality. This broad term covers land, air and water in a variety of uses ranging from urban areas through intensely managed ecosystems for agriculture, agroforestry, forestry, grazing, fisheries and wildlife to parks, recreation areas and nature preserves.

Assessment is analyzed and interpreted information for management that identifies, inventories, describes, understands interrelationships, quantifies, predicts and monetizes the many changes and effects in using natural systems for the continued benefit of society. Such an analysis shows whether an economic development project is consistent with various national goals and with other programmes of the nation. Assessment includes beneficial as well as adverse consequences, impacts, exploitive opportunities, land capability and limits of land use, implementation guidance, adaptive project management, monitoring and retrospective evaluation. It augments conventional engineering and economic analyses by especially seeking out subtle, indirect, offsite and long-term consequences of technological change.

Indigenous capability is the trained manpower, organization, and equipment within the developing country to provide the necessary information gathering, analysis and professional judgment to perform natural systems assessment.

Building and strengthening includes technology transfer, in-service training, counterparting, university education, public information, curricula, pedagogical techniques, special education and training materials plus developing the institutions and organizations to carry out these functions.

Barriers to Building and Strengthening Indigenous Capability for Natural Systems Assessment Via the Consulting Contract

The statements that follow are phrased pointedly in order to dramatize the problem. We recognize that actual situations are complex and that these barriers and behavior patterns are not often so sharply defined.

Environmental concerns are often everybody's second priority but no one's first. The urgency of growing more food and exploiting new energy supplies is so great that available manpower is fully committed to the primary development goal. There is a dire shortage of persons trained in assessment. Developing country officials commonly perceive EIA as a lengthy and complicated process as practiced in the United States and are thus wary of its implementation without becoming aware of the value of an appropriate assessment. The skepticism of many developing countries that EIA may delay or divert project completion does not motivate the best persons to seek out the job of environmental assessor; the reward structure tends to reinforce this bias. A related motivational problem is that EIA at the project level usually can be only mitigative and not part of a comprehensive long-term strategy for sustainable use.

There is a great disparity in level of expertise (and formal training and salary and status) between local trainees and the expatriate consultants. This makes training more difficult because of remedial catch-up learning that must be accomplished and because of great variation among the trainees. The time constraint in consulting contracts prevents the patient methodical teaching that is desirable for effective long range upgrading of indigenous skills on a broad base. Assessment and appraisal work must proceed quickly and on schedule. Continuity in training is very difficult to achieve when the consulting is on an irregular project-by-project basis.

Aid agencies may not fund training at all or may add training funds to the amount of the repayable loan rather than give a grant for this

purpose. Training is very difficult to specify in a contract for consulting services, particularly so because the quality of instruction and consequent increases in trainee skills are hard to evaluate objectively.

Some lenders offer substantially lower interest rates (e.g., 4% from Japan or Arab countries compared to 11% London Bank Rate) but do not provide any technical assistance (including training) as does the World Bank. These low rates may not be the best overall bargain but are obviously very attractive to developing countries.

Behavior of Consulting Firms

Unfortunately, after decades of foreign assistance, there is still evidence of arrogance and insensitivity on the part of some expatriate consulting firms. Some 'promoters' create projects with host country politicians that would not pass objective appraisal. One government official even spoke of two types of consultants—'political' consultants who had extensive links with both donors/funders and host countries and used these links to promote projects and rearrange priorities, and 'technical' consultants that provided required engineering and design services. This criticism cuts two ways, however. A lack of familiarity with the country involved is seen as a drawback while too close a connection may be considered as 'political' and undesirable.

More ubiquitous is the attitude of consultants who feel that training would create local competition and who therefore would rather leave the host country dependent on them for future and continuing advice. This is true despite the fact that technological knowledge is increasing much faster than it is being transferred so that it is doubtful that many firms in developing countries will catch up in any foreseeable future.

Continuing dependency is also achieved by ignoring training and leaving a complex sophisticated product (report, computer simulation, etc.) that the local assessors cannot transfer or carry further into practice in the next assessment. The analysis is often a 'black box' of hidden assumptions, options considered, methods of assessment—only the bare findings and recommendations may be reported.

Even if training is a part of one contract, it may not be in the next and consultants do little to foster continuity of technology transfer. The skills for a successful consultant do not necessarily include the skills for training.

Behavior of Host Countries

Some developing countries appear not to know what their objectives are, nor which has priority.

There is often a lack of political will to adopt and implement a conservation policy. The high political cost of delay in development means they cannot wait to train their own assessors but must continue to depend on expatriates if environmental concerns are to be studied at all. Even the Terms of Reference for consulting contracts may be written by foreigners.

Often a developing country assumes a client role rather than that of a full partner in development. It does not insist on including training or counterparting in consulting contracts and does not take initiatives to make each contract build continuously on previous training.

Consultants may not be chosen well because there is no objective basis and procedure for their selection. Price, and not competence, is too often the dominant factor in choosing among proposers. The ability to professionally evaluate a consultants work is crucial if a country is to make wise choices among the many firms offering consultant services. It is precisely these types of technical background and skills that are often in very short supply in developing countries.

Competent personnel in many countries are drastically overcommitted and may not be given training opportunities even when such opportunities are available. Local experts often promise time and services to expatriate firms as a part of mandated technology transfer—but are not readily available when the work must be done. An undesirable conflict of interest is found in many host country consultants and firms because of their multiple employments.

Aid Agency Behavior

Most development assistance agencies do not require an environmental impact assessment as a condition of grants or loans. Those that do may err in imposing a *pro forma* EIA (using a prepared checklist or matrix method) that cannot easily be steered into providing the particular management information that the host country really needs—so talent, time and money are used inefficiently. The EIA is not viewed as an integral part of management information as we define it in this report.

Some aid agencies push favored consultants on to host countries or at least do not assist and advise in selecting the best consultant. As stated previously they may not urge training or even allow it to be paid for with their funds. Another frequent complaint about bilateral assistance agencies and 'tied' aid with mandated consultant services is that the consultants provided are high cost and sometimes of mediocre quality. Universities and other organizations that receive these

TABLE 1

The actors in the assessment of natural systems for development

1. *Borrower Agency*—host country environment officials who write the Terms of Reference for assessment contracts and select the performer.
2. *Project Proponents*—host country developers who plan the project and promote its implementation, and who may be skeptical about including conservation measures or about the findings of the EIA.
3. *Lender*—international aid agency officials who grant the loan and advise on contracting for the assessment to be paid from the loan.
4. *Expatriate Consulting Firms*—technical experts who consult on Terms of References (and may assist in writing them, and revising them) and perform assessments.
5. *Host Country Consulting Firms*—technical experts who are partners in the assessment contract or who, if they become successful prime consultants, bring specialists in to help with the assessment.
6. *Residents*—farmers, fishermen, forest dwellers who live on the project site and possess valuable information about the natural systems, and who are vitally effected by the project.
7. *Academic Experts*—personnel at host country institutions who may take part in various aspects of the environmental evaluation and review.
8. *Trainees*—host country personnel qualified to be counterparts and trainees and who will be part of the indigenous assessment capability when they are trained.
9. *Educators/Trainers*—personnel in universities, national training centers or international institutions.

contracts have been accused of clearing out departmental 'dead wood' and sending these people abroad as consultants.

Aid agencies suffer from the same syndrome as the countries themselves—environmental concerns are also their second priority, and an EIA or natural systems assessment may be done only to meet bureaucratic requirements. If the aid agencies do not have their own trained assessment staff they also are not able to evaluate consultants work and help the host countries. In this way the situation arises where lack of commitment and expertise on both sides—host country and aid agency—leads to indifferent environmental assessment that leaves all parties dissatisfied and unhappy with the results, and the EIA process.

Table 1 lists the many actors involved in the assessment of natural systems who should cooperate within the economic development process to promote training.

SUGGESTIONS FOR IMPROVEMENT

In order to improve the quality of development projects by explicitly incorporating environmental concerns, and thereby build towards sustainable economic growth, two areas need professional strengthening in many developing countries:

On the one hand the governments involved need to upgrade their professional staff so that they can design and evaluate environmental assessments. That is, the governments need to develop a capability to critically evaluate work done in this area.

The second major area for strengthening, and the focus of this paper, is the ability for local professionals to provide the required services. For training of indigenous personnel to become a successful part of consulting contracts, a system of economic compensation is necessary. Training, sharing of knowledge, and technology transfer will always take place to some extent when professionals work together, but there will be little intensification of these functions until all parties gain in the process.

The following excerpts from the World Bank's "Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency" (August 1981) are useful in suggesting improvements in training:

2.53 While all professional staff of the borrower may gain experience through day-to-day exposure to the consultant's team, some may be temporarily released from duty and incorporated into the consultant's team, to receive training in some specific field (paras. 2.56-2.59). This latter group of professionals is normally known as counterpart staff.

2.54 While the Bank fully supports the participation by counterpart staff, certain matters should be discussed before specific agreement is reached on the level, numbers and responsibilities of such staff. These include: (a) the responsibilities of counterpart staff in relation to the consulting firm's contract responsibilities; (b) the extent to which counterpart staff are released from their normal duties; (c) the extent to which counterpart staff can fit in with the consultant's proposed work schedule; (d) the arrangements for replacement of unsuitable counterpart staff; and (e) the field and travel costs of counterpart staff.

2.55 In addition to the professional counterpart staff, government agencies are often able to supply clerical, administrative and technical services in support of the consulting firm, which can substantially reduce the cost of its contract. When such support services are provided, they normally become an integral part of the consulting firm's work programme, and should be under its operational control and direction.

Training

2.56 It is the Bank's policy to support the strengthening of local capabilities in borrower countries by promoting the transfer of know-how—knowledge and skills—to local professionals engaged in projects it helps finance. International consulting firms retained by the borrower can serve a useful role in this training.

2.57 To be effective, a training programme requires a concerted effort by the borrower and the consultant, commencing with the programme's design, and extend-

ing through its implementation and the final evaluation of work performed. Two factors are especially critical. One is the borrower's willingness to select qualified local professionals for training, to make those professionals available for the duration of the programme, and to afford them appropriate opportunities to apply the acquired skills in the future following the consultant's departure. The other factor is the consultant's willingness to recognize the training function as a separate obligation, distinct from its other services, and to anticipate possible time and personnel conflicts between these competing demands. Both of these factors should be addressed by advance planning and provision of adequate funding and time for the training programme.

2.58 Both government counterparts and, in the case of joint ventures, staff of domestic consulting firms may receive training within an international consultant's assignment. In either case, the objectives of the training programme should be included in the TOR sent to the invited consultants and, during contract negotiations, the programme should be defined with regard to the trainers and trainees, the skills to be transferred, and the time frame.

2.59 Training has a cost in money and time, and the budget for the training programme should be included in the consultant's contract. The Bank is willing to consider financing the additional cost of such training programmes as part of the total contract cost.

Obviously the need for training (in terms of numbers, subject matter and degree of skill) varies from one country to another. In some countries, there is sufficient trained manpower to completely staff the local offices of expatriate consulting firms and to form local firms which are competent and competitive. In others there are only a few persons with the required skills or background. Therefore, our first suggestion is in the form of a continuum that takes full advantage of existing host country capability at whatever level it is found or to which it has developed. We suggest that *consulting work* on natural systems assessment *be methodically and persistently shifted* as far along as possible *toward complete performance by local professionals*. The sequence is somewhat as follows, proceeding from a situation where local capability is very low to where it is high.

1. Consultant works mostly at foreign home base with minimum visits to host country.

2. Work in host country with counterparts as available.

3. Training on the job specified in consulting contract.

4. Formal teaching and technology transfer courses given as part of assessment contract.

5. Joint ventures with local firm and staffing of local offices with indigenous professionals.

6. Complete performance by local professionals

of foreign and host country firms with only addition of occasional specialists.

7. Additional and continuous training done by local trainers.

One motivating factor for expatriate firms to increase use of local talent lies in the higher costs of employing expatriate professionals, which costs will make them less competitive as host country capabilities inevitably improve.

Competition should be exploited by the host countries. More advertising may increase the number of interested firms. Relevant experience should be stressed more than price in selection of consultants.

Terms of reference should allow maximum flexibility for consultants on how to accomplish assessment, so as to elicit ingenuity, but should recognize some degree of training as a contract requirement, with appropriate compensation. Adding a training component to consultancies will require careful planning and an adequate budget but is likely to be cost effective compared to other arrangements for transferring technology and skills to perform natural systems assessment. The type and amount of training and compensation can be a matter for negotiation, with ideas to be solicited from prospective consultants.

We suggest that some form of training be included in every consulting contract as an explicit task to be paid for. The training task need not correspond directly to the primary product of the consultancy—it is the consultants' presence (with their technology, skills, and experience) that affords them the opportunity to contribute to the needed transfer of knowledge and methods.

In many instances the first task at or before inception of a development project is to *impart awareness* to top level policy and decision makers about strategies available for *development with conservation*. At the regional level the first priority training task may be land-use planning (e.g., ecological mapping). A major effort will be to train people in the skills for acquiring and analyzing technical information about the natural systems of the region.

Specification of the training component within the Terms of Reference should leave some flexibility for the consultant to take advantage of potential indigenous trainee aptitudes and levels of experience within the specific country or region. In calling for counterparts, a TOR might specify for example, that a quota of 30% of the total person hours to be expended for assessment be provided by indigenous professionals. The exact manner of meeting the contract quota can be a matter of negotiation based on proposals by prospective consultants and the needs of the host country.

Consultants with substantial overseas experience often have much pragmatic knowledge as to the availability of appropriate skilled persons within a specific country or region. By virtue of their professional network contacts, they may also be aware of the availability, and aptitudes of potential trainees. With motivation, consultants can find out further information on the possibilities and methods for indigenous skill upgrading, they can also quickly recognize limitations.

Host country universities need to be strengthened for the long-term education and training of assessors. Faculty members need on-the-job experience to acquaint them with the non-academic character of natural systems assessment—i.e., it is an intensive short-term applied research project. Environmental centers at universities can provide the necessary continuity of study on baseline data and ecological surveys that cannot be assembled from the episodic EIAs.

Developers (mission agencies and private firms) could be required to create and pay for advisory studies on conservation aspects of their major projects. These continuing studies would couple research and training as designed by an advisory committee. For example, Korea requires an expatriate development firm to name one member and the government two members of such a committee. The committee meets twice yearly during project planning and implementation to study and report on the ecological soundness of a project, including mitigative measures.

Host countries need more assistance in choosing architectural and engineering contractors and in arranging for natural systems assessments. Some sort of "guide to obtaining desired results from consultants" seems to be needed. Standards of accepted practice may be generated by the International Federation of Consulting Engineers or similar groups. Help is particularly important at the stage of preparing Terms of Reference. Retired consultants who have an established reputation in one or more assessment areas may serve as independent advisers to host governments. Such advisers, sometimes on a minimal fee basis, can help optimize conservation and environmental training components of economic development projects.

In summary, the expatriate consulting firm is potentially effective as a training and technology transfer agent. Lenders and borrowers have the opportunity to build and strengthen indigenous capabilities for natural systems assessment and management by working out equitable arrangements with these firms as a component of consulting contracts during economic development.