Invitation to join a discussion on self-reliance

Though the book *Energy for a Sustainable World* (1988), which contributed significantly to the new paradigm for energy, focussed primarily on what energy systems should achieve, it was also concerned about how this product should be achieved, i.e., the process that should be followed. In particular, there was stress on the importance of building indigenous capacity and of strengthening self-reliance in energy analysis. In fact, workshops with this objective were organized at Princeton (1980), São Paulo (1984) and Princeton (1998) hoping to stimulate new South-South and South-North collaborations.

In these efforts, self-reliance, a situation in which people exercise their own efforts, abilities, powers and judgements, was central both to the approach to energy analysis and to the methodology of working together. It is central to the philosophy because development has no meaning without self-reliance, and to the methodology because self-reliant development has no meaning without self-reliant analysis and planning.

After twenty years, the balance-sheet shows mixed results. The end-use-oriented development-focussed approach is now widely accepted and may even have become conventional wisdom. But the record with regard to self-reliance is less satisfying. On the one hand, alongside the token mentioning of capacity-building, the strengthening of self-reliance is not being adequately ensured in most energy programmes and activities. One even wonders whether it is on the agenda of those organizing these programmes and activities. On the other hand, there is a proliferation of Northern-located energy analysts (often expatriates from developing countries) to intercept the donor funding for energy analysis pertaining to developing countries. In addition to their proximity to Northern donors, their advantage is their nexus with elites in developing countries. They soon develop a vested interest in competing with and undermining indigenous capacity.

Also, energy analysis is still dominated by analysts from the industrialized countries. The contribution from developing countries is negligible. Obviously, capacity-building in developing countries is given lower priority even by organizations that are supposed to be committed to this challenge. Capacity-building is unfortunately a slower time-consuming process, and programme executives in a hurry do not sufficiently emphasize the task. One must also note the negative and counter-productive role played by the major diversion of extremely scarce Southern energy analysis talent into greenhouse gas mitigation analysis for developing countries even though the global warming problem has arisen primarily from Northern energy consumption patterns.

Against this background, a doubt arises – was the whole emphasis on capacity-building in developing countries (i.e., indigenizing energy analysis capacity) unnecessary, even misplaced? Clearly, the issue deserves discussion. To initiate this discussion, this journal is reprinting below the *Declaration on Self-Reliant Energy Analysis and Planning,* which was an outcome of the 1984 São Paulo workshop. With all the experience of the past two decades and the entry of new actors, the original declaration deserves fresh scrutiny. Can it survive in its pristine form with regard to its validity, relevance and usefulness in today's globalizing world?

Straightaway, it can be seen that the declaration does not distinguish explicitly between self-reliance and self-sufficiency, i.e., between autarky and autarchy. In fact, this possibility of confusion was realized almost immediately and in 1988 the book *Energy for a Sustainable World* took care to stress the distinction in the following words (Page 62). "Self-reliance refers to the ability of individual people or whole nations to support themselves. It also has to do with their independence, whether it be in everyday life or foreign policy. As it is used here, self-reliance is not synonymous with 'self-sufficiency'. The latter implies that an individual or a village or a nation uses only its own resources to meet its needs. Self-reliance, on the other hand, takes into account the uneven distribution and development of resources in the world and encourages human exchanges in the form, for example, of trade or aid so long as dependence is avoided. Dependence inhibits a people's ability to make independent decisions and to act in their own best interests. Dependence, whether it be dependence on a welfare state or an international ban or on another country's oil, leads to external controls."

This journal has taken the initiative to provide a forum for the discussion. An effort will be made to elicit the views of the original signatories of the 1984 São Paulo Declaration. [The text of the São Paulo Declaration is reproduced below on Pages 6-8.] Comments on the document will also be invited from the participants of the December 1998 Princeton Workshop on "Catalysing South-North and South-South Collaborations on Energy Strategies for Sustainable Development". And of course, the readers of ESD are invited to offer their opinions. These views will be published after suitable editing in a later issue of ESD, followed perhaps if warranted by a fresh declaration. ■

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Declaration on Self-reliant Energy Analysis and Planning

(São Paulo, June 7, 1984)

We, the undersigned, are a group of independent energy analysts from both the industrialized countries and the developing world. We are cooperating on a voluntary and equal basis to carry out studies focussing on the end-uses of energy.

Our approach is based on the viewpoint that energy is only one among a number of major global problems. We believe that energy strategies must be consistent with the solutions to the other global problems, and advance the global goal of sustainability, which involves the components of equity, economic efficiency, environmental soundness, long-term sustainability, self-reliance and peace. This global goal requires different emphases in the developed and developing countries, and in particular implies that energy strategies must contribute to the achievement of need-oriented, environmentally sound, self-reliant and peaceful development in developing countries.

We are also of the view that these requirements of energy strategies can be satisfied by scrutinizing how energy is used, and by whom, and for what purpose, that is, by taking an *end-use*_approach.

Self-reliance, by which we mean a situation in which people exercise their own efforts, abilities, powers and judgements, is central both to our approach to energy analysis and to our methodology of working together. It is central to our philosophy because development has no meaning without self-reliance, and to our methodology because self-reliant development has no meaning without self-reliant analysis and planing.

An end-use-oriented energy strategy has to be locale-specific in character to a large extent and therefore tailor-made for each country. Its successful development depends upon (i) detailed information about the country, (ii) intimate knowledge of the local setting and context, and (iii) involvement in the process of national development. Our global effort therefore is guided by the principle that country studies should be done by native energy analysts, permanent residents of their own countries, steeped in the structure and traditions, and committed to the future of these countries.

By the same token, countries with similar needs, resources and problems require similar strategies, and therefore, the development of regional strategies should be achieved through regional efforts based on the efforts of energy analysts living in that region. And, at the level of developing world as a whole, the stress should be on South-South cooperation for the formulation on energy strategies.

Self-reliance, by which we mean a situation in which people exercise their own efforts, abilities, powers and judgements, is central both to our approach to energy analysis and to our methodology of working together.

This stress on self-reliance has been stimulated in part by some disturbing features in the manner in which otherwise well-motivated aid in the area of energy analysis and planning is distributed and utilized. We refer here to the fact that the energy-related assistance provided by international institutions, aid agencies and donor countries usually makes inadequate contribution to the growth of indigenous expertise and to the building-up of local institutions in the field of energy with self-reliance failing to attract high priority in the agenda of these institutions. Consequently, the natural time constants associated with the learning process tend to be replaced with impatient demands for time-targeted solutions.

In identifying individuals and groups for advising on and executing projects, international institutions, aid agencies and donor countries usually turn first to "experts" from the industrialized countries, and only as a last resort to potential analysts from the developing world. Thus, it is the consultants and groups of the industrialized countries that execute most of the energy-related projects that are funded by international institutions and donor countries. As a result, the bulk of the funding in these projects gets recycled back to the industrialized countries.

Even more important is the temptation for these "experts" and consultancy groups to concentrate on the energy issues of developing countries, instead of working on the energy problems of their own countries. The continuation of funding and consultancies for Third World energy problems to such individuals and groups in the industrialized countries usually results in a weakening of the self-reliance of developing countries – in other words, there is a vested interested in not fostering indigenous capability and in not building up local institutions. An unhealthy competition also develops between foreign and local analysts for the analysis of local energy problems.

This leads to the classical pattern where the raw material – in this case, energy data – is collected in a developing country by native personnel and then transported to the imperial metropolis where the real value-added takes place by processing. But, the know-how of processing – in this case, energy analysis – remains in the imperial metropolis.

Unfortunately, many networks have come into being based on what is often referred to as the *hub-and-spokes* structure in which the developing country groups which collect the data have to depend via spokes on a hub group in an industrialized country for the analysis of their data and even for collaboration with each other.

There is little justification for such a hierarchical organization of energy analysis when a considerable amount of research talent is often available in the developing countries. The point is that specialized training is not essential for work on energy analysis. We have become convinced therefore that each country can draw upon its trained scientists and engineers to develop its capability in energy analysis and planning by education-through-commitment and learning-by-doing.

The whole process has been facilitated by the rapid developments in microcomputers during the past few years. The analysis of energy data no longer requires expensive mainframe computers. At quite a low cost, indigenous groups can be each given a powerful modern microcomputer and made self-reliant in energy data processing with the aid of widely available software.

The pattern of support to energy analysis and planning described above effectively constitutes an undermining of self-reliance and the antithesis of development. These consequences, we are sure, are not the intention of the international institutions, aid agencies and donor countries. On this assumption, we would like to offer the following suggestions.

The basis of our suggestions is that *how* energy analysis and planning is carried out and by *whom* are as crucial as *what* results emerge from this exercise. We submit that the long-run benefits of funding the learning curve of energy analysts from the developing countries and of investing in the building up of local energy-related institutions far outweigh the narrow short-term efficiency costs which might have to be paid for depending upon indigenous personnel and institutions rather than foreign "experts" for energy analysis and planning. Thus, the perspective should be that strengthening the self-reliance of developing countries in energy analysis and planning is as important an objective as carrying out these tasks.

There must be shift in focus from* project funding to program support. *Such a shift implies that time-targets have to be thought of much more in connection with the program as a whole rather than with the component projects that are assembled into the program.

If international institutions, aid agencies and donor countries are to develop the patience to ensure the learning process which individuals and groups from developing countries must necessarily go through, there must be a fundamental change in the perspective of these donors.

In the first place, there must be shift in focus from *project funding* to *program support.* Such a shift implies that time-targets have to be thought of much more in connection with the program as a whole rather than with the component projects that are assembled into the program. These programmatic time-targets can include the time necessary for the initial learning phase, the growth of expertise and the building up of appropriate institutions. Also, program supports must include a specific component for the strengthening of self-reliance in energy analysis and planning, that is, for the growth of indigenous capability and the building up of local institutions in the area of energy.

The shift in focus from projects to programs is essential for another important reason too. The project-mode of funding may have been quite appropriate for supply-oriented energy projects, which are usually large in scale and few in number. But, energy projects focussed on demand management and on the end-users of energy tend to involve very many diverse technologies tailor-made to suit regional and local conditions, and these technologies are often small-scale in character. Hence, a large number of small projects are involved in the demand-management and end-use-oriented approach, and the implementation of such an approach is impractical with project-type support, in which the disbursal of funds is closely administered on a project-by-project basis by the funding agency. For this reason too, it is desirable to reorient aid from specific projects to broad programs for which the detailed allocation of program resources and time is largely the responsibility of the local institution in accordance with the overall program objectives.

A third reason for suggesting a shift in focus from project funding to program support is that time-targeted projects executed by foreign "experts" rarely leave behind in the developing country a legacy of expertise and institutional vehicles for articulating that expertise. Usually, the developing country remains as dependent on foreign "expertise" as before the project. On the other

hand, program support, which includes growing indigenous expertise and building institutions, leaves the developing country more self-reliant in energy analysis and planning.

The change in perspective and in mode of operation of the funding agencies suggested above implies other shifts in emphasis. Thus, the approach proposed here involves as much concern with the *process* of energy analysis and planning as with the *products* and with *people* and *institutions* as with *reports* and *papers*. The constant concern should be with whether self-reliance is growing or not.

This alteration of attitude does not preclude either contributions from industrialized country institutions to the energy problems of developing countries or the use of foreign consultants and institutions for special assignments. But, it does impose some guidelines for the involvement of these individuals and institutions in the development processes.

The suggestion is that institutions from the industrialized countries should scrupulously avoid using their advanced intellectual and infrastructural resource base to compete with corresponding institutions from the developing countries. This guideline would be satisfied if institutions from the developed countries channel their concern for developing country problems into three areas of work: (1) basic research on the fundamental aspects of energy analysis and planning, rather than on actual analysis or on energy devices of specific importance to the developing countries; (2) technology assessments which are invaluable to developing country analysts; and (3) information support to developing country energy groups.

The suggestion is that institutions from the industrialized countries should scrupulously avoid using their advanced intellectual and infrastructural resource base to compete with corresponding institutions from the developing countries.

With regard to foreign consultancy services, the plea is that *before* they are recruited, it must be proved that they are both essential and unavoidable; that when they are hired, they must elaborate on the measures which they will take to associate local groups with the projects and programs; and that *during* and *after* the work, they must report on the growth of local capability and the building up of institutions. And ideally, it is indigenous institutions, which must subcontract out assignments to foreign consultancy services.

Further, to ensure that the foreign assistance is contributing to strengthening indigenous capability, the bulk of the aid should be spent in the recipient countries.

We submit that if these suggestions are adopted by international institutions, aid agencies and donor countries, then we will witness a burst of self-reliant energy analysis and planning in the developing countries, and thereby a major thrust towards the self-reliant development of these countries.

We would also suggest in conclusion that though the present discussion and proposal concentrates upon energy analysis and planning, the issues are generic in character and are valid in a much larger context. Thus, what has been stated here in connection with energy can be extended to policy studies on development, science and technology policy, women, etc. ■

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