

BUILDING FOR DEVELOPMENT

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The traditional response to the "problem" of school building, or any other sort of building, in developing countries is to produce a low cost design. This response is understandable but, I think, inadequate.

It is understandable because the traditional view of building centres round the product - the school, the factory or the house. The provision of shelter for social and economic activities is a recognised and urgent necessity, particularly in developing countries whose stock of physical infrastructure is inadequate while the demand for more is growing fast.

However, the view of building activity which seems to us more pertinent to development is the view that sees building as a process: a process which involves the contractor and his employees, the materials suppliers, the client, the final users. It is in fact a management process which brings these individuals together to produce the building required.

Once one adopts this process approach to building activity, the school building problem appears in a new light. The necessity to design according to the requirements of the users and within cost and space limitations is still of paramount concern. But the designer must also consider the limitations and requirements of the construction resources available to carry out his work. He must consider the availability of materials, the ease or otherwise of transporting materials and components, and the level of technical and organisational skills available to assemble the building.

To some extent, designers and administrators of public building programmes in developing countries are inevitably aware of the limitations imposed on them by the technological and organisational capacity of the local building industry. There is, however, an inbuilt temptation to sidestep these limitations by importing materials and skills - in fact, in many cases, importing a complete organisational unit in the form of an international construction company to carry out the work. In some cases, building programmes financed by unilateral or multilateral aid agencies effectively stipulate the use of materials, design teams or construction firms originating in the aid-giving countries. What no one seems to be particularly concerned with is the net anti-development result of such practices.

It is a fact that an average of 50 per cent of all capital investment all over the world goes into construction. Furthermore, as a country develops - as its average annual per capita income rises - it will invest

an even greater proportion of its G.N.P. in construction, so that investment in construction rises in both absolute and relative terms as countries get richer.

Therefore, every developing country relies, and will continue to rely, on its construction industry to provide it with a large proportion of the investment and development projects it requires. The agricultural and industrial sectors, communications and transport, housing and education, all require to a greater or lesser extent the services of a construction industry, whether that "industry" operates as a private sector industry with contractors, or a public sector organisation with direct labour building teams.

An urgent development priority

So the growth of a healthy, competent building industry, covering all aspects of the building process, is an urgent development priority. To ignore this priority deliberately or by default, and to allow the use of foreign skills, firms and materials to deprive a potential local industry of a real development opportunity can only be detrimental to the long term social and economic needs of the country.

Many people would argue that the priority is to get buildings built and that they must use whatever resources are to hand; and also that the local industry is more likely to develop in competition with more efficient and sophisticated expatriate firms.

Both arguments are valid up to a point. But buildings have been and are being built all over the world by indigenous builders, sufficiently competent to erect a standard single storey concrete block structure. Before engaging an expatriate contractor, the client must be quite convinced that his requirements genuinely necessitate a multi-storey block using precast concrete elements with a terrazzo finish. The priority is really to build a school, but the type of structure is not necessarily pre-determined.

The second argument about competition from expatriates proving a stimulus is only valid if local personnel have the opportunity of obtaining the training and experience necessary to enable them to compete on equal terms with their expatriate counterparts. Most expatriate companies are run by experienced and highly-trained managers, backed by an international organisation and supported by large reserves of capital and credit facilities. Under these circumstances it is likely that most local firms will take a good many years to get to a competitive position.

During these years, the country which relies on imports in this way will be paying an inflated price for its buildings. Import duties, foreign exchange costs, repatriation of salaries, accommodation and other allowances for families of expatriate staff, added to the opportunity cost of not using at least its public building programmes as a development experience for the local construction industry, lead to the conclusion that the country will not get sufficient value for money from scarce resources invested in construction.

Desirable government strategies

What can be done to change this? A basic requirement is that the

government must take on responsibility for the development of the construction industry. In most Commonwealth countries the old Public Works Department has been transformed into a Ministry of Works. The Ministry of Works usually has, as in its colonial days, a purely executive function. Its task is to construct what the other client ministries - Health, Education, etc., require. It has no formal responsibility for the progress of the local industry on which it virtually relies. Yet, to the other ministries, such as Education or Trade and Industry, which provide training and individual incentives for other sectors of the economy, construction is the prerogative of the Ministry of Works.

Once the government is prepared to take action to encourage the growth of construction activities, there are a number of strategies it can pursue on different levels.

At the administrative level, the planning process responsible for establishing and implementing development targets should be integrated with machinery responsible for information about the supply and distribution of construction resources. A "Construction Planning Unit", working in co-operation with the Ministry of Economic Planning and the Ministry of Works, could be set up to collate and analyse the information required.

At the industrial level, steps must be taken to provide an industrial climate conducive to the expansion of local entrepreneurial activity in construction. Availability and terms of bank and other loans, credit facilities and company legislation could be reviewed with reference to the needs of indigenous contractors and manufacturers.

Education and training, a normal responsibility of government, is not generally directed to meeting the needs of a growing construction industry. While there has been a significant increase in the institutional training of professions and the provision of craft training, the contractor/manager is usually without any recourse to guidance in the art and science of construction management. Much of Building for Development's work during its three years of existence has been concentrated on producing and testing teaching material and techniques for local building contractors and construction managers in East and West Africa. This whole area of adult education is one that has been curiously neglected by educationalists in spite of their dependence on the services of the building industry for other purposes.

There are other factors which contribute to a development policy for the construction industry. Building for Development's concern is that the clients of the industry in developing countries should be aware of the development needs and potential of the industry on which they rely, as well as their own immediate demand for its specific products.