

few verities that Bonvin has yet to learn, however, not least that, in the role of research assistant, government officials would be not better than students (for structural rather than personal reasons); and that the mythology of religious behaviour often reflects outsider's prejudices rather than reality.

Given the title of this book, it is extremely disconcerting to have no usable information at all on ethnic variables, household structure, modes of land tenure, or the history of the Rusizi plain peasant holdings. (Bonvin's concept of 'culture' is also somewhat strange: see below). One presumes that the normal tests of significance were applied to the variables dealt with, but the reader must remain content (after all of the defects of the survey) with imprecise results, whereby some variables 'seem to' suggest, or be correlated with, others. If one is going to use a particular method of investigation, one should at least stick by the formulae of its symbolic rectitude, even while admitting that there are problems!

Of more importance, perhaps, is the fact that Bonvin does not appear to have used much, if any, of the existing sociological works on the Rwanda-Burundi area, in formulating the areas he wished to investigate and the precise questions he wished to ask. It is all very well to pay passing deference to the value of ethnographic work, while ignoring completely its content; and quite another to build generalisable research onto such earlier work. Bonvin appears to claim to have done the latter, but actually did the former, which may explain why he seems to regard 'social integration' as consisting of access to governmental authorities and the mass media, and 'culture' as compromising religious observance and food taboos.

Finally, in this slim volume there is nonetheless a certain amount of unnecessary repetition of methodological issues. This space would better have been occupied by data tables with their tests of significance; or, better still, by a copy of the final questionnaire (available on request, from the Development Centre of the OECD, but not included in this book).

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The Construction Industry in Developing Countries. Alternative Strategies for Development, Jill Wells, Croom Helm, London, 1986 (184 pp, £25.00)

This book is one of the latest publications on the construction industry in developing countries. The subject has been looked at for a long time, but only by specialised Institutions such as UNIDO and ILO, and is not very widely known. However, for some years research and books (1) have investigated this subject with a technico-economic approach showing the key role of this sector and analysing States' Policies and their results. This book does not only that, but also gives us some proposals concerning alternative strategies for African developing countries.

The author show the specific role of the construction sector in the development process and in economic growth (construction output represents often more than 50% of the gross capital formation of a country) and the clear relationship between construction output and economic growth indicated through statistical analysis. She describes the under-developed resources of the sector in some developing countries, namely, Kenya, Ghana and Nigeria.

For the author, those situations are not only due to the poor level of development of a country but are principally a result of the structure of the construction industry and its organisation, characterised by the divorce of design (architects, engineers and quantity surveyors) and production (building and civil engineering contractors), and the system of competitive tendering. It has been inherited in most cases from the colonial period. The effects of such organisations on the cost and quality of construction are described in detail, and also how they could become a barrier to development. She gives several examples, one of which is the case of professional fees for the designers which are usually calculated as a fixed percentage of the final cost of the

contract. Not only do professionals not have the knowledge and experience required to research and develop appropriate designs that are urgently needed, but under the existing structure of professional fees, they also have no incentive to adapt their design.

The role of the State vis a vis the construction sector and principally vis a vis the industrial structure is examined later on, by looking at what the state normally does and what it should do towards a more rational structure. For example, it may be noticed that "fee-cutting has finally been allowed to intrude into the design process of Britain". Unfortunately, this is not yet the case in a number of developing countries. The alternatives to competitive tendering as well as the improvement of direct labour force organisation are examined very carefully.

The second part of this book is dedicated to two case studies, namely Kenya and Tanzania.

The Kenyan experience since Independence is well described and more particularly the history and development of the National Construction Corporation (NCC). Briefly, the construction sector like other sectors such as transport, wholesaling and retailing, was dominated by the Asian community for historical reasons. To serve its political proposals of 'Kenyanisation' which became in fact 'Africanisation', the Kenyan government created the NCC, with the technical assistance of a foreign firm, to assist African contractors entering the construction industry. The NCC had three functions; helping contractors to obtain work, providing them with adequate finance and assisting them in the actual process of construction. The author, through the historical evolution of this Institution, shows its contradictions and the results 15 years later. The distribution of work between the African and Asian contractors has not changed and in 1983 there were no more than a handful of firms able to compete with established Asian owned firms. However, the State attitude towards the construction sector has persistently ignored calls for 1) an expansion of the public sector role in training; 2) rationalisation of the building materials and components industries; 3) greater public sector control over standards of construction design; and 4) the simplification and rationalisation of contractual procedures. The author believes that the State is therefore to be blamed for the lack of Africanisation in Kenya.

In the case of Tanzania, the government has followed a policy of nationalisation, whereby the state took over a number of privately owned assets and itself assumed the role of producer in the construction process. The motivation behind such actions was to obtain for the State a share of the profits of the private contracting industry by adding to the very limited contracting capacity existing in the private sector. Here too, the use of foreign technical assistance has been necessary. Again the policy met with only limited success. The State did create additional capacity in the industry; but this was marginal in comparison to the work undertaken by the private sector. Both cases are characterised by a clear intention to conserve the market structure and competition, without any real attempt to improve or adapt its functioning, which is one of the reasons for the poor results of those policies.

One point which emerges from these two cases but which is not really developed by the author is the role of foreign firms and the relative failure of technical assistance agreements. This is due to the attitude of foreign firms, which could be explored in another book.

In her conclusion the author develops her own proposals based upon Cuban and European experience of standardisation and prefabrication of building components.

The principles of industrialisation of the construction sector (standardisation of components, simplification and repetition of design details, and the rationalisation of construction methods using specialised buildings brigades) have been very effectively employed in those countries. As far as resources are concerned the expansion of local production of building materials through massive investments has paid off.

This process has been implemented before in planned economies in Eastern Europe but also in market economies in Western Europe after the Second World War. These governments

encouraged such standardisation through incentives and provided favourable conditions for setting up factories for industrialised building.

However, the author recognises that for poor countries the importation of such prefabrication systems as the Cuban 'Giro' system in Tanzania has been very unsuccessful. Later she emphasises the point that "whatever the level of technology adopted the principle of standardisation and repetition will open the door to prefabrication of complete facilities or components".

The thesis proposed and the case studies in this book are very interesting, but in considering the Zimbabwe case (which is not mentioned at all in this book) one must make some remarks. Zimbabwe as a whole, and more particularly its construction sector, is relatively more developed than many other African countries. Although some conditions are also present in Zimbabwe, like competitive tendering and the divorce of design and production, their effects are probably not so important. However, concerning the proposed policy of prefabrication one should note that Zimbabwe, unlike Cuba and West African countries after the Second World War, is not short of labour at least in the area dealt with by the book (non skilled and skilled builder). So there is no need to save on labour-use here?

However, one of the main messages of this book is the need for developing countries to design their own strategy for the development of the construction sector, using, if possible their own resources, and if possible their own technology. The debate continues over how to achieve this.

This book should be read not only by specialists, but also by anyone interested in reaching a deeper understanding of the construction sector, which provides us with one of our basic needs: shelter.

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