

E. F. Schumacher, **Small is Beautiful: a study of economics as if people mattered**, Blond & Briggs, London, 1972, £3.25; Abacus, Tunbridge Wells, £0.75.

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This collection of essays, updated from various papers and lectures originally written over the last 25 years, is a welcome elaboration of the philosophy of Dr Schumacher, particularly in relation to the problems of the consumption of non-renewable resources and the application of technology to the problems of poverty in the Third World.

In fact the book covers a far wider range of problems. Divided into four parts, parts two and three, on *Resources* and *The Third World* are flanked by sections on *The Modern World and Organization and Ownership*. The first section deals in a metaphysical way with *Production, Peace and Permanence*, and *The Role of Economics*, etc., while the final section covers forecasting, large scale organization, socialism and new forms of ownership.

Although many of his views are controversial, especially in academic circles, the sincerity and simplicity with which they are stated deserve considerable respect. As the third reprinting and paperback edition of the book demonstrates, the author succeeds in getting through to the general reader, an achievement which even those academics who disagree with his views can only admire.

Dr Schumacher was amongst the first to predict the exhaustion of oil reserves, which he did nearly 25 years ago, while working as an Economic Advisor to the National Coal Board. His predictions have most certainly been in the right direction, although he himself points out the inherent inaccuracy of long-range forecasting in a later section of his book. He may be wrong to argue in his chapter on Resources that MIT's *Limits to growth* report should have concentrated solely on energy resources as being the most important and urgent problem. But that the UK and other governments should not have worked out more realistic fuel policies is deplorable, and Dr Schumacher's discussion of this issue is most pertinent. So too is his discussion of nuclear energy and the 'energy sink'. He argues that nuclear power stations use up more energy than they produce and that they present problems of security and waste disposal as yet unsolved by engineers and planners who ignore the possibility

of disturbance which might disrupt their delicately balanced assumptions. His views are today supported from other sources and the comment of Richard Marsh, the then Minister of Power (1967) to the effect that Schumacher's lecture (of which this chapter is an adaptation) "was one of the more extraordinary and least profitable contributions to the current debate on nuclear and coal cost" (quoted on p. 133) shows just how much he was ahead of his time.

His views on technology are perhaps those for which he is best known, certainly in Britain, where he conceived and founded the Intermediate Technology Development Group. Derived from an evident concern with the quality of life of the individual, his analysis of the inappropriateness of modern technology to many aspects of life, and the unavailability of alternatives both in the West and in the Third World, is not only highly relevant, but has been the inspiration of much theoretical and practical work on alternative technologies for use in different sectors and economic situations.

However it is precisely in relation to problems of underdeveloped countries, in the third section of the book, that Dr Schumacher illustrates the incomplete and unsatisfactory nature of his analysis of economic and social aspects as represented in this volume. For nowhere does he face directly the political implications of the policy changes he recommends, nor indeed the historical and political causes of the problems he seeks to solve.

He begins by analysing the concept of 'development', arguing that aid policies in the past have exacerbated the discrepancies within underdeveloped countries between the modern urban sector and the traditionally poor and exploited rural sector, the home of the vast majority of the populations of poor countries. With this line of argument one cannot quarrel, though it would have been more convincing had it included some analysis of how the urban-rural differential had developed overtime and the role of imperialism in promoting what Dr Schumacher characterizes as a dual economy.

But when he goes on to discuss 'Social and Economic Problems calling for the development of Intermediate Technology', the argument is even more incomplete and unsatisfactory. Having implied that only the modern sector (which he admits is indispensable for economic evolution) has any relation with the world economic system, he goes on to state quite blandly that he is "concerned here exclusively with the problems of help-

ing people in the non-modern sector". He then proceeds to argue for the necessity of cheap, simple technology using labour and local resources to improve the incomes, productivity and employment prospects of the rural population. He does not, either here or at any other place in his book, take up the question of the interdependence of the modern and non-modern sectors, or the political interests, both national and international, operating in favour of the allocation of infra-structural and financial resources which is biased in favour of the modern sector. Although, in a later chapter entitled "Two Million Villages", he explains that the rural sector never receives anything like a proportionate share of the revenue earned by oil and other exported commodities in underdeveloped countries, he never tells us why this is so.

Similarly, his optimistic forecasts of the beneficial effects of the adoption of intermediate technology in poor rural areas in underdeveloped countries do not imply that there could be any obstacle, political or other, in simply by-passing the existing power structures and bringing suitable technology to the rural population. Dr Schumacher seems to assume that since "the needs of poor people are relatively simple", all that is necessary is to make simple techniques available to them.

His assertion that the application of intermediate technology must by-pass the educated elite of professionals and administrators who do not understand or appreciate its importance does not help in explaining how this can be done. He blames the bias of this elite towards Western standards and technology on an inappropriate education system rather than on international patterns of consumer preference and cultural imperialism, of which the educational system is only a part. This again illustrates how Schumacher avoids fundamental causal analysis.

While the concept of Intermediate Technology has certainly penetrated at least the thinking of aid agencies and government departments it is sad that the political implications of the philosophy are so blatantly ignored by its chief protagonist. China is often cited (though, interestingly enough, not by Schumacher) as an example of how human effort can make good lack of financial capital, yet revolutionary political changes were surely a prerequisite for the application of what in many instances is intermediate technology.

As to the author's more esoteric views on social organization and human motivation, the reader

must judge for himself. But his rather baffling section on economics requires comment. It is strange that his review of the 'Role of Economics' should ignore all discussion of economic thought beyond the narrow neo-classical lines recently fashionable in the West. His criticism of bourgeois economics is to a large extent valid. But someone seriously interested in changing decision-making criteria within our society or those of underdeveloped countries needs to come out of his self-imposed isolation and consider seriously and fundamentally the theories and policies which he dismisses so hurriedly in this volume. He might even encounter a body of thought similar to 'meta economics', a term he invents in order to describe what has been covered for over a century by classical political economy'.