

# CENTER FOR INSTITUTIONAL REFORM AND THE INFORMAL SECTOR

University of Maryland at College Park

---

Center Office: IRIS Center, 2105 Morrill Hall, College Park, MD 20742  
Telephone (301) 405-3110 • Fax (301) 405-3020

## SOCIAL CAPITAL AND DEVELOPMENT CAPACITY: THE EXAMPLE OF RURAL TANZANIA

Louis Putterman

IRIS Reprint No. 58

This publication was made possible through support provided by the U.S. Agency for International Development, under Cooperative Agreement No. DHR-0015-A-00-0031-00.

The views and analyses in the paper do not necessarily reflect the official position of the IRIS Center or the U.S.A.I.D.

Author: Louis Putterman, Brown University, Providence.  
Reprinted from *Development Policy Review*, Vol. 13 (1995), pp. 5-22.

---

---

# Social Capital and Development Capacity: The Example of Rural Tanzania

Louis Putterman\*

---

Which came first, economic development or cultural change? The usual paradigm would appear to order causality as in the title of the periodical: economic development leads to changes in attitudes and behaviours. These may then lead to more economic development. For example, economic development changes the incentives governing fertility choice, laying the behavioural foundations for a demographic transition that in turn helps to bring about further economic development. But how and when do cultural conditions facilitate or retard economic development? Are there any cultural preconditions for development?

This article will suggest that changes in attitudes, practices and knowledge that are not necessarily correlated with indicators of modern economic development may contribute to the potential for such development in ways that should not be overlooked by those assessing the development process. The argument will be based on two key elements: expanding the familiar idea of human capital to consider its social or cultural dimension and the importance of informal learning; and proposing to go beyond dichotomous notions of traditional and modern to a richer notion of varieties of social organisation. The argument is suggested by and illustrated with some observations on the modern economic history of Tanzania.

## **Economics and development: a longer-run view**

It is a commonplace to note the ahistorical tenor of neo-classical economic analysis. Economic studies do not always lack a historical dimension, but in discussions of economic development the time line tends to allow only for a dichotomy between pre-industrial and industrial, less developed and developed societies. In the well-known theories of Lewis and of Fei and Ranis, for example, the pre-industrial stage is characterised as a 'traditional' economy, in

---

\* Professor of Economics, Brown University, Providence, RI, USA. This paper results from a research project on 'Institutional Renewal in Rural Tanzania' funded by the Institutional Reform and the Informal Sector (IRIS) programme at the University of Maryland, whose support is gratefully acknowledged.

which customary income-sharing allows people to partake of basic subsistence even if their incremental contribution to output is negligible. The approach abstracts from differences among different pre-industrial economies.

Anthropologists and others taking a longer view of history by contrast divide human social development into numerous stages or types, such as the technological sequence leading from gathering through long and short fallow systems and up to multicropping agriculture, used by Boserup (1981), or the classification of societies as bands, tribes, chiefdoms, and ancient states, by Service (1962). In such classification systems, modes of production are associated with levels of population density, with degrees of complexity of social organisation, and with certain cultural features. Furthermore, the average amount of time devoted to productive activity, and probably also the degree of drudgery distinguishing work from leisure time, increases markedly with population density and with the complexity of the society's division of labour. The technology of hunter-gatherers supports a low-density population, which is organised in small, relatively dispersed, and socially non-stratified bands. The division of labour is limited, there is limited trade in goods, and indigenous writing systems and literature are absent. By contrast, densely populated agricultural societies with state-level organisation entail considerably more complex divisions of labour. Taxation, bureaucracy, and coinage exist in the latter but not the former type of society.

From the standpoint of an undifferentiated development economics, bringing modern economic growth to either the Australian outback or coastal China is a question of industrialisation, of physical and human capital formation under policies reflecting a proper balance between market forces and public goods provision by the state. The difference between a society of hunter-gatherers and one of differentiated artisans, peasants, and traders, is ignored. To do so, however, may be perilous to our understanding of the development process.

Economists treat the useful knowledge which we acquire by expenditure of time and other resources as human capital, something an individual can choose to invest in for the sake of a projected stream of financial returns. But human capital also has a societal or cultural aspect: societies build up a stock of knowledge, behavioural repertoires, and attitudes that are held by their members as collectivities, with certain classes of individuals (for example, males, or members of a particular occupation) specialising in some parts of this stock, other classes in other parts. A society's division of labour with respect to the holding of its overall cultural capital stock<sup>1</sup> can be regarded as a kind of collective memory algorithm.<sup>2</sup>

---

1. In the term 'cultural capital', the word 'culture' carries a broad meaning that is inclusive of knowledge and symbolic systems, as in its usage by social anthropologists.

2. For a similar treatment of individual and organisational knowledge, see Nelson and Winter (1982).

Social capital accumulates over long periods, adapting and permitting adaptation to new environments and technologies.<sup>3</sup> The rate at which a society can adapt to a new set of opportunities is in part a function of the degree to which its existing human capital stock is suited to meeting them. Sub-Arctic hunter-gatherers might adapt more easily to the challenge of wresting a similar subsistence from a terrain or climatic zone somewhat different from that with which they had been familiar (imagine the ancestors of today's native Americans migrating gradually southward from Alaska) than might, say, a society of sub-tropical rice farmers whose sophisticated planting and water management techniques are of no use there. Growers of millet might adapt with relative ease to life in a maize- or rice-growing region, whereas the sub-Arctic hunting and fishing population might find the same transition quite difficult. Confronted with the demands of modern industrial society, gatherers, bush-fallow cultivators, and farmers engaged in high-intensity cropping in a commercialised although pre-modern society, could be expected to react differently as communities, if not always as individuals.

Notions of cultural *evolution* suggest themselves here, but are in no sense critical. Insofar as agriculture, writing, and cities are far more recent phenomena than are the most 'primitive' tool-making cultures, the one would appear to have evolved into the other. However, the image of unilineal evolution is problematic. Societies vary in many dimensions at once, and there is little hope of finding a monotonic scale of social complexity or modernity.<sup>4</sup> Whether contemporaneous societies should be ranked on a scale of evolutionary advancement, whether more complex societies are in various respects superior to simpler ones, and whether the benefits of cultural 'progress' with respect to instrumental knowledge, material comforts, etc., outweigh possible costs in social cohesion, environmental degradation, and so forth, are questions with difficult normative dimensions that need not detain us here.<sup>5</sup> The fact that development, broadly construed, is almost universally *desired* is a matter of observation. The argument being made here is simply that different cultural inventories are likely to exhibit differing degrees of adaptability to differing new

---

3. The term 'social capital' is used in a different context by some sociologists, referring to an individual's investment in social ties. Use of the term to refer to the broad human capital of a collectivity of individuals, in this article, has little overlap with the latter usage. The terms 'social' and 'cultural capital' are used interchangeably.

4. An example illustrating the futility of seeking a general ranking of cultural 'advance' is the comparison of Spanish with Mexican and Peruvian cultures in the fifteenth century.

5. It should be clear enough, though, that even if one could establish an unambiguous scale of social progress, it would not imply that members of 'more advanced' societies are morally superior to those of 'less advanced' ones. The individual basically inherits the culture into which he or she is born.

situations. And the study of modern economic development is a study of adaptation.

Historically, ostensibly less developed societies have often confronted ostensibly more developed ones, with the outcome being determined primarily by martial and organisational factors. The European colonisation of the Americas, Africa, and Asia is the most far-reaching modern episode, although the southward march of the Han in China or the eastward migration of the Bantu in Africa in past centuries provide non-Western examples of colonisation of areas at 'lower' technological and organisational levels by cultures at 'higher' developmental stages.<sup>6</sup> Europe's colonisers found societies of a wide range of complexity: for example, a relatively low-density population in much (but not all) of North America that combined low-intensity agriculture with hunting, fishing, and gathering of wild produce; densely settled intensive rice-cultivating civilisations with elaborate state structures in East Asia; animal husbandry-based cultures in parts of Central Asia; and so on. The face of the post-colonial world is an inverted image of the levels of population density and of technological and social complexity of the worlds that Europeans conquered. Where population density was low, for example in most of North America and Australia, aboriginal populations were pushed aside and vastly more populous European societies effectively took their place. Where population density was high, as in India and China, the demographic impact of colonialism occurred primarily through its indirect impetus to indigenous demographic transitions. Intermediate settings, including sub-Saharan Africa, Mexico, Peru and Central America, saw varying degrees of European incursion and of partial indigenous retreat (consider South Africa, where Europeans came close to establishing new European societies along North American or Australian lines, yet could not roll back the numerical superiority of a substantial indigenous population).

In the emotionally charged atmosphere surrounding the ending of European colonialism after the Second World War, the new nations of Africa and Asia joined the existing less industrialised nations of the Americas in political and economic discourse as a unitary 'Third World' in which a common battle for economic development was to be fought. As these nations have differentiated themselves in economic performance, differences in economic policy and internal political factors, such as the presence or absence of sharp ethnic divisions, have received attention as explanatory factors. Culture enters the

---

6. Conquest of 'advanced' civilisations by 'less advanced' ones is also far from unknown, the recurrent conquest of agrarian empires by neighbouring nomadic peoples being a familiar theme in history. Where the former societies were relatively stable, however — for example Chinese society on the eve of the Mongol conquest — it was the conqueror who tended to adopt the ways of the conquered. The conquest of Roman Europe by 'barbarians' from the east may be said to have produced a similar result, albeit with considerably more delay.

discussion only in such exceptional, and conceptually metaphysical,<sup>7</sup> contexts as in asking whether there is a 'Confucian' element underlying the East Asian economic miracles. The possibility that different regions, nations, and regions within nations entered the recent race for development with significantly different 'developmental capacities' based on their differing stocks of knowledge, attitudes, skills, and so forth, is one that is not frequently broached.

## Application to Tanzania

### *Recent events and observations*

From 1967 until the mid-1980s, the Government of Tanzania, a peaceful but poor country occupying a large territory extending from the inland lake zone of the African rift system to the Indian Ocean, embraced a socialist ideology which it used to justify both the movement of its rural population into registered administrative villages, and the collective or public control of rural commerce (see Coulson, 1982; Putterman, 1986, contains other references to the literature on this period). By the early 1980s, parastatal inefficiency, policies such as territorially uniform crop pricing, and a severely overvalued exchange rate, had joined with external factors such as rising oil and falling commodity prices to cause a plummeting of official food sales, a decline in export revenues, and the breakdown of the government's import-substitution industrialisation strategy. (A concise chronology of Tanzania's economic crisis and reforms is given by Bryceson, 1993.) The late 1980s then saw the introduction of IMF-sponsored structural adjustment and market liberalisation policies, bringing moderate relief to the economy.<sup>8</sup> Even so, the 1993 *World Development Report* listed Tanzania as the second poorest country in the world, with a GDP per capita of US\$100.<sup>9</sup>

For peasant farmers, the liberalisation that has been carried out since the mid-1980s has entailed a number of changes. First, the government's relaxation of the restriction on selling food crops to private traders, and the sharp decline in state purchases of those crops that eventually followed, meant that crops were easier and more profitable to sell in areas near major markets, but harder and

---

7. Metaphysical in that insufficient attention is accorded to culture's endogeneity to technological and social variables.

8. After registering declines between 1976 and 1984, GDP per capita rose by an average of about 1.1% per year during 1986 to 1991, according to Bank of Tanzania output figures and the 1988 Population Census's estimated population growth rate of 2.8% per year. See World Bank (1991).

9. ICP purchasing power parity estimates of GDP per capita in 1990 suggest a similar rank, although there Tanzania leads five countries, two of them (Ethiopia and Zaire) by a significant margin (\$572 versus \$369 and \$367, respectively).

less profitable to sell in more remotely situated regions and villages (a more detailed discussion will be found in Putterman, 1994). Second, easing of constraints on private internal trade<sup>10</sup> and removal of restrictions on the importation of consumer goods, including inexpensive second-hand clothing, made it far easier to obtain goods at reasonable prices, a result that may have helped to restore incentives for crop production.<sup>11</sup> Third, continued public monopoly in the export-crop marketing sector, the tightening of financial constraints on that sector's institutions, and unfavourable world prices made it difficult for producers of coffee, tobacco, and other export crops to capture benefits from the massive devaluation of the Tanzanian shilling. The weak financial condition of the co-operative unions and the entrance of private competition also brought an end to the practice of supplying farmers with inputs on credit, with the charges to be deducted from the purchase prices of crops.<sup>12</sup> Relatedly, the lifting of government subsidies on the prices of fertiliser and agricultural chemicals made it more difficult for farmers to afford such inputs. Finally, an ambitious programme of road rehabilitation (the Integrated Roads Project<sup>13</sup>) began to lower real transportation costs and relieve some transport bottlenecks, facilitating the movement of produce from some rural areas.

From a reading of most accounts of the periods of increasing state intervention, economic crisis, and liberalisation, one might have expected to find a fairly straightforward pattern of changes in the welfare of rural Tanzanians. Rural well-being should have begun falling at the time of forced movement into villages, and should have fallen further as restrictions on internal trade and constraints on imported consumer items increased. Welfare should have hit rock bottom somewhere around 1983, when GDP was shrinking and international aid flows were drying up. And it should have begun to recover following the liberalisation of trade in food and consumer goods, with some variation among localities as a result of differing transportation costs,<sup>14</sup> and with some farmers

---

10. At the height of socialist/statist policies, private individuals were forbidden from operating shops in rural areas, and villages were told to run such shops collectively. Intra-regional trade was made the province of Regional Trading Companies.

11. Tests of the hypothesis that consumer goods availability or unavailability has been a major factor explaining changes in crop output and marketing in Tanzania are found in Bevan et al. (1989). For sub-Saharan Africa more generally, see Berthelemy and Morrisson (1987).

12. The presence of private competitors discouraged co-operatives from supplying inputs on credit because farmers who received such inputs could now sell their crops to individual traders so as to avoid input charge deductions.

13. Supported by the IMF and bilateral donors, the project was planned to pour US\$871 m. into restoring and upgrading Tanzania's road network between 1991 and 1998.

14. Regions located far from the main distribution centres fared better under pan-territorial pricing.

being hurt by rising input prices and by the disappearance of credit for input acquisition.

The actual pattern of changes reported by rural people was more complex than this, however. Nearly all of the farmers interviewed in a sample of 29 villages located in five of the country's 20 mainland regions<sup>15</sup> asserted that the standard of living in their villages had been improving, in many cases improving *steadily*, during the previous fifteen to twenty years. In particular, village leaders referred to improved construction of houses, digging of latrines, frequency of visits to health centres especially by expectant mothers and small children, attendance at primary and to a lesser degree at secondary schools, wearing of manufactured clothing and shoes, and possession of such items as iron roofing sheets, wrist-watches, and bicycles, as signs of a rising standard of living and of a changing way of life. 'You would be amazed at the changes which have taken place here. Fifteen years ago, people were walking around in animal skins. Now they wear manufactured clothing. And today, mothers know that when a child is sick, you take them to a dispensary' typifies the statements repeatedly heard. Most of these changes were said to have been taking place even during the years of national economic crisis.

Such reports could be little more than ruling Party propaganda, repeated by the Party-affiliated local leaders who provided them. However, variation in plausible accompanying details, and corroboration by non-leaders, make them less easy to dismiss.<sup>16</sup> The possibility that they contain at least a measure of

---

15. The sample studied was by no means entirely random, and the findings must be viewed as impressionistic only, given the short time spent in each village. The regions (districts) visited were Arusha (Arumeru, Babati), Dodoma (Kondoa), Kilimanjaro (Moshi Rural, Hai), Iringa (Iringa Rural, Njombe), and Ruvuma (Songea, Mbinga). This sample is biased towards areas of relatively high commercial potential, where the impact of both the imposition and the removal of trade restrictions could be expected to be relatively large. The sample does not incorporate variation in major crops grown, in accessibility to markets, and in the local importance of parastatal and co-operative marketing entities. Villages selected were biased by considerations of accessibility, and such villages should again be relatively directly impacted by changing national economic policies. Probably the most important bias is that due to the high proportion of the interlocutors holding leadership positions in the villages, something unavoidable in short visits, given that visitors are required to present themselves to these leaders with official letters at the outset of any research activity. For an excellent discussion of the problems of piercing the official veneer to see the realities of rural socio-economic structure in one Tanzanian district, see Sender and Smith (1990).

16. For example my research assistant, a lecturer at the University of Dar es Salaam, believes that these reports reflect fundamental trends, stating that his home village on the shores of Lake Nyasa has also changed dramatically in the past fifteen years. Formerly, he says, people saw no reason to produce crops for sale, since they could live off the produce of their gardens and fruit trees without need of cash. Partly due to educational campaigns by local leaders, however, people are now marketing crops so as to afford the costs of building improved homes, buying school uniforms, and purchasing some basic consumer goods. Much of the

truth leads one to ponder whether there may exist dimensions of a process of social and economic development that economists overlook because of their preoccupation with questions of state intervention and the workings of the market. The changes referred to here might be grouped together under the old-fashioned term 'modernisation' (for classic references, see Parsons, 1964, and Inkeles and Smith, 1974). That process, village leaders appeared to be saying, was going on even as the growth of commerce and in some respects production was being disrupted by government policies. While not directly challenging the conventional judgment of the statist economic policies of Nyerere's government, their assertions suggest that assessing his frontal modernisation strategy may be a more complex task than is sometimes assumed.

### *Historical background and human development*

In pre-colonial times, Tanganyika<sup>17</sup> was peopled largely by groups of Bantu origin who practised varying degrees of mostly low-intensity agriculture and animal husbandry. Land was abundant, relative to population, and farmsteads were limited more by the amount of labour available and the perceived need for food than by questions of ownership. Most plots grew only one (perhaps mixed-stand) crop a year, and they were abandoned to regenerate bush when their fertility gave out. There were many dozens of mostly loosely organised tribes, the internal social structures of which could be complex compared with that of a simple hunting band, but rarely so elaborate as that of higher-density societies with substantial imperial bureaucracies, religious hierarchies, and occupational castes. While the mixing of Arab and Bantu peoples at some coastal sites and islands had created a culture, the Swahili, with a tradition of long-distance trade and a centuries-old literature, most inland tribes lacked written languages or coinage. The indigenous population also included pastoralists and some hunter-gatherers, and speakers of Nilotic, Nilo-Hamitic, Khoisan, and some unclassified languages, some of whom probably predated the Bantus in their region.

To Europeans who conquered (and indeed created) Tanganyika in their race to carve up Africa, distinctions as to level of development were obvious. Commercial activity was believed to be so limited in the indigenous cultures that it was thought desirable to invite immigrants from India to play the role of traders. Marketable economic activity was felt to be constrained by the natives' lack of desire for traded goods, so, to induce participation in the cash economy,

---

change in attitudes and practices occurred during (and in spite of) the years of national economic decline and crisis.

17. The discussion in fact concerns mainland Tanzania, known in colonial times as Tanganyika, only.

the demand for cash had at first to be created by levying a poll tax. Commercial farming was at first the province of European settlers, although later, when it was clear that white settlement would not be as substantial as in neighbouring Kenya and Rhodesia, Africans were welcomed into these ranks and became important producers of cotton and coffee. Bringing Christianity and civilisation to the African population was a rationale for the colonial enterprise, and numerous European missionaries dedicated themselves to the task.

Tanzania's first post-independence leader, Julius Nyerere, may have become a strident Third World nationalist and anti-colonialist, but his background as a product of the mission school system should not be forgotten. Indeed, Nyerere internalised the attitudes of the paternalistic colonial governors who preceded him. Despite his socialist ideology and his tendency to blame Tanzania's problems on 'the North', he consistently identified 'poverty, ignorance, and disease' as the principal enemies of his people. If one bears in mind that Nyerere began his career as a secondary school teacher and that he enjoyed being known throughout his decades of national leadership as Mwalimu ('the teacher'), his stress upon 'ignorance' as a national problem deserves emphasis. In identifying the source of national poverty and of subordination to greater powers in the world political and economic system as a lack of modern education, Nyerere's views differed little from those of his own teachers. Educating Tanzanians and seeking to ensure that economic advance was coupled with economic justice ranked equally high among his priorities.

While modernisation and socialism each had a part in inspiring Nyerere's rural development programme, the former was arguably the more important. Moving people who once lived in scattered and shifting homesteads into nucleated villages accessible to motorised transportation was conceived of as a way of making basic health care, potable water, marketing services, and, perhaps first and foremost, education, available to rural Tanzanians. The stress placed on education was manifest in a goal of achieving universal primary education by 1980, and in a massive adult education campaign.

The villagisation, the most dramatic and lasting element of Nyerere's programme in the countryside, has been often and effectively criticised for its coerciveness and haste. It has been questioned on environmental grounds, and its identification with such socialistic elements as the promotion of collective production and communal land tenure have often been portrayed as contributors to the country's agricultural stagnation and decline. However, one sees little serious discussion of the impact of villagisation on the habits and knowledge bases of millions of affected people. Hundreds of thousands of Tanzanian children who may well have been unable to attend school from dispersed homesteads have gone to primary schools in the past 18 years. Similar numbers of children and adults have visited dispensaries, gone to adult education classes, and been exposed to messages regarding sanitation and health practices, methods

of home construction, and the organising of self-help schemes in such areas as local transportation and co-operative grain milling.

It is a difficult task to evaluate the impact of villagisation on rural welfare. But one indication of its consequences may be found in the fact that the preponderance of anecdotal evidence suggests that most families who were moved into villages with varying degrees of coercion 18 to 20 years ago have remained in those villages, even if they continue to cultivate farms in the localities from which they were moved. Interviews suggest that the reason why they have not returned to their prior residential pattern is not fear of official reprisals, but rather affirmative valuation of the social benefits of village living. When Tanzanians complain, today, of the escalating costs of school fees and uniforms, for example, they are implicitly indicating that they attach a high value to the education of their children — a value high enough to cause them to endure major costs in terms of farming smaller quantities of inferior land in proximity to their new homes, and of walking long distances to their old fields, camping there to protect their crops, and so forth. This does not prove that rural welfare has increased, but it strongly suggests that rural attitudes have changed.<sup>18</sup> 'We are used to living in villages now, and we would not turn back to the old way' is a typical remark.

### **Cultural capital stock and economic development**

No one would suggest that Tanzania's frontal modernisation effort has been a resounding success. The quality of available schooling has often been low, adult education programmes were heavy with political propaganda, and rural dispensaries could not be stocked. The quintessential tale of mismanagement concerns the government's ambitious programme to bring piped water supplies to the villages by 1991. Tens of millions of aid dollars were poured into boring wells and supplying diesel pumps and related equipment. Within a year or two of their delivery, many of these systems were inoperative (Therkildsen, 1988; Smith, 1994).<sup>19</sup>

Critiques of the water programme have often focused on its 'top-down' character. Light-skinned aid workers from wealthy far-off lands arrive one day in well-equipped LandRovers, complete their work quickly, and drive off to another destination. A high-ranking official appears to have his photograph

---

18. Note the relevance of the familiar conundrum of the conventional economic theory of welfare: how does one compare well-being in differing situations when the subjects' own preference scales are not unchanging? Non-orthodox answers may be relevant here, but are beyond the scope of this article.

19. Smith cites a 1992 government report as estimating that, as of 1991, 35–45% of village water projects installed in the two preceding decades were not in working order.

taken, and a dedication plaque bearing his name is installed. For a few weeks or months, there is a miraculous flow of water, and hours of drudgery carrying the precious liquid by head from distant hills are an unhappy memory. Then the system malfunctions, and no one knows how to fix it. Send for the Europeans! Send for the officials! But the Europeans and officials are busy installing pumps and putting up plaques in other villages. The system rusts and the women are sent off for water as before.

Yet, while such critiques are undoubtedly correct in emphasising the alienness of the aid-supplied systems and the lack of a sense of 'ownership' that comes with the process of transmittal, there is an element of technical capacity that also needs to be considered. In a society in which piped water is found in every home, one finds not only a certain number of plumbing specialists, but also a much larger number of people capable of doing basic plumbing repairs. Where motor-driven machinery is a part of daily life, basic mechanical knowledge is common. In most of rural Tanzania, plumbing is unknown, and a small maize grinding mill is likely to be the only motor-driven machine in a village. Unlike their poor counterparts in many parts of Asia and Latin America, many rural Tanzanians have had limited opportunities to engage in 'modern-sector' work, and those who have migrated to cities and obtained skills as mechanics or plumbers are unlikely to return to the poorer rural areas (other than for brief visits) during their prime working years. Hence, unless a substantial training programme were to be launched, a village could well lack the technical skills needed to keep a diesel pump and tube-well system operating.

The mechanical and plumbing knowledge in the case just discussed is an example of the familiar concept of human capital. What this article argues is that that concept needs to be broadened beyond the usual context of acquisition of formal education and occupational skills to encompass the repertoires of entire material cultures. Thus, poor farmers in Tanzania are endowed with a wide range of skills. Left to themselves with only a panga (knife) and a hoe, they can construct shelters, grow their food requirements, and survive where a European family, deprived of their LandRover and radio phone and given only those same tools, would probably perish. But the knowledge of how to fashion sticks and mud into a house, how to thatch a roof, how to render edible the cassava from your garden, and so forth, is of no direct help in fixing a diesel engine.

The importance of human capital has certainly not been overlooked by development economists. An oft-repeated riddle asks: how is it that a few billion dollars of aid sufficed to turn post-war Europe into an economic power-house, while a huge development gap remains after many times that amount has been poured into the Third World? The standard, and I believe substantially correct, answer is that while Europe's physical infrastructure was badly damaged by war, most of its industrially-oriented human capital was left intact; and it is

human, rather than physical, capital that is the most important determinant of economic development.

Using the undifferentiated notion of 'traditional' society, the non-European world as a whole would appear to be in a uniformly disadvantaged position in the race to catch up with Western levels of industrialisation. What the more articulated view of development embraced by this article suggests is that, within the less industrialised world, different societies stand in very different positions because of differences in human capital endowment, including more subtle distinctions in such areas as literacy, mechanical knowledge, and work habits. These differences probably interact with differences in national policies, such as those concerning trade orientation, to generate differences in rates of economic development.

Just as the size of its physical capital stock was an imperfect predictor of Europe's growth prospects at the end of the Second World War, so too does current output of goods and services appear to be a poor indicator of a country's prospects in the tournament of economic development.<sup>20</sup> In the late 1970s, for example, Tanzania ranked on a par with China and ahead of India in reported per capita income (respectively, \$230, \$230, and \$180) (*World Development Report*, 1980). By 1992, both China and India reported three times the per capita income of Tanzania.<sup>21</sup> While some might be content to attribute the differential performances of these countries to differences in economic policies, which must indeed have played an important role, the possibility that differences in developmental *capacity* also help to explain these divergent trends merits serious consideration.

China and India liberalised their economies beginning in the late 1970s or the early 1980s, while Tanzania began to do so only after 1986. However, the first two countries also have dense populations with vast numbers of skilled workers and professionals. Their agricultures have incorporated irrigation and intensive cultivation practices, and they have supported large cities, bureaucratic states, literate cultures, and significant merchant classes, for millennia. Tanzania, by contrast, had very small numbers of skilled and educated workers. Most of its

---

20. Note that this article is not concerned with the proper way of measuring achieved economic development or welfare, but rather with elements of developmental capacity. There are nonetheless some overlaps between the latter elements and 'capabilities' type indicators considered in, e.g., the UNDP's Human Development Index (HDI). It may be pertinent to note, in this regard, that while Tanzania's ICP purchasing power parity GDP per capita exceeded those of only 5 other sub-Saharan African countries in 1990, its HDI surpassed those of 28 SSA countries, which together contained over 80% of SSA's population (UNDP, 1993).

21. The *World Development Report* 1993 gives GNP per capita in that year as \$370, \$330, and \$100, respectively. ICP purchasing power parity measures of GDP per capita in 1990 for the 3 countries, at \$1,990, \$1,072, and \$572, put China much further ahead of India, but still place both Asian countries substantially ahead of Tanzania.

population engaged in low-intensity, subsistence-oriented, rain-fed agriculture or pastoralism, and its modest internal trade was dominated by small non-indigenous populations of Arabs and south Asians. There was little indigenous capacity to maintain the limited modern transportation and manufacturing infrastructure which existed in the country. Post-Independence output figures may give a falsely optimistic assessment of the country's economic capacity, since a significant proportion of GNP was generated by colonial and foreign-aid-related capital imports and expatriate management. Given conducive economic policies, 1980s China used its reservoir of human capital, including an industrial workforce which had been growing since the beginning of the century, to quickly absorb technological know-how and organisational skills from more industrialised neighbours and trading partners.<sup>22</sup> It is doubtful whether such a broad transfer of technology and organisation could be supported by the local human capital base of even today's Tanzania, much less that of a decade or two ago.<sup>23</sup>

### **Implications of an evolutionary view of human capital**

The more articulated or evolutionary view of inter-societal differences in human capital endowments that is proposed here may appear to have profoundly pessimistic implications for contemporary Africa. That is indeed the case if one's starting point is a naive belief that all nations compete on an equal footing. If one were to entertain a more realistic view of economic development and of the role and nature of human capital, however, then the approach taken here might help to identify more desirable paths forward even as it clarifies the present situation.

A central point is that human capital needs to be understood as a socially embedded and multi-dimensional phenomenon that takes time to be reshaped

---

22. Post-'Liberation' China had used the skilled workforces of pre-war Shanghai and Manchuria as a pillar of its industrialisation efforts during the 1950s, 1960s, and 1970s, dispersing them to newer industrial establishments where they assisted in the training of millions of additional skilled workers.

23. Some relevant comparisons of Tanzania with both India and Pakistan are made by Coulter and Lele (1993: 28) in the context of their assessment of an attempt to spread 'Green Revolution'-type grain production methods to Tanzania. They argue that conditions were more favourable in India and Pakistan, in part because these countries 'had abundant trained and experienced personnel in their governments' and because 'the transportation and communications networks were stronger whereas they are one of the weakest in Tanzania, even in comparison with the rest of Africa'. On the other hand, echoing one theme of this article, Lele (1992) identifies relatively high literacy and surprisingly sophisticated knowledge of farm technology *as of the early 1990s* as advantages upon which future Tanzanian development might build.

and to accumulate. The capacity of a society to absorb modern technologies and forms of organisation is related to its existing endowment of human capital. Investing in that capacity will promote future economic development, but investment by its nature requires time.

One message for Tanzania is that under no circumstance could its indigenous population have been expected to achieve rapid economic progress along European or East Asian lines in the immediate post-colonial period. The process of transition from its pre-colonial status as a culturally diverse collection of agriculturalists and animal herders speaking over a hundred different languages to a nation with an adequate foundation of knowledge and experience in modern industry, farming, and commerce was at too early a stage at that time. But the continuation of that process of transition, building on changes begun in the colonial period, has been gradually contributing to the country's development capacity even during periods of stagnation of the conventional economic indicators. Even though GNP per capita has grown little since Independence and the reality of the suffering imposed by the deterioration in economic conditions since the 1960s cannot be questioned, Tanzania is today much closer to being able to staff its government offices, repair shops, and schools with skilled local labour than was the case 30 years ago.

This leads us back to the question of whether, setting aside our moral judgment of the coercion involved, the gathering of its population into 'development villages' was helpful or harmful to Tanzania's economic development. The argument that it was helpful, made by the rural Tanzanians interviewed, centres on its impact on the spread of primary education, on access to health care, and on attitudes toward a range of factors from literacy and hygiene to brick-making and participation in the cash economy. The counter-argument would focus on ecological problems and poor locational choices from the standpoints of farming and water resources.<sup>24</sup> Whether on balance the negative effects of villagisation outweigh its positive effects is a question that the available data do not permit me to answer. I must also be agnostic about the impact of the events of recent decades on such intangibles as morale, hope, and the possibility of co-operation, which by some accounts have been severely

---

24. Some would be tempted to criticise villagisation further by linking it with policies that slowed the growth of the market economy and thereby deprived Tanzania of the resources with which adequately to fund the very health and education programmes which villagisation was intended to foster. But such a critique would be largely misplaced if the anti-market policies reflecting the socialist strand of the Nyerere programme can be separated from villagisation as such, which reflects its modernising strand.

damaged by the inability of politicians to deliver on their promises and by alarming increases in the incidence of corruption and of crime.<sup>25</sup>

Note that it is not argued here that the changes in the socially embedded human capital base to which I refer are independent of market activity. Market activity may be a great catalyst of modernisation, as when the market provides incentives for the acquisition of new skills and knowledge. If economic development in itself fosters modernisation by introducing new consumption patterns and life-styles and by engendering changes in preferences, then interventions that retard market growth will also have a retarding effect on modernisation. This is presumably true of the anti-market policies which Tanzania pursued during the 1970s and early 1980s.

Nor is it contended that development capacity, understood in a social evolutionary framework, is an adequate predictor of developmental achievement, when taken by itself. Such a contention would imply that policies do not matter, whereas one can undoubtedly find numerous examples of countries that began the modern economic development race with very similar capacities, yet have achieved very different outcomes to date, in part due to different developmental policies.

At the same time, it is suggested that the modernisation process, seen as a gradual change in the human capital base of a society, encompasses more than market activity, and government policies with respect to such activity, alone. Movement from less labour-intensive to more labour-intensive forms of productive activity increased exposure to machines and their workings, knowledge of health-promotion techniques, and increased abilities to keep records, obtain information through printed media, and keep financial accounts, all signify modernisation of the human capital base, but need not always be associated with markets.<sup>26</sup> To repeat, that such modernisation is unambiguously good is hardly implied here. But if modern economic development and its benefits in terms of higher productivity, better health, and

---

25. This discussion also leaves aside the tragic impact of the still growing HIV epidemic. Although the influence on this epidemic of the policies considered here is probably of second-order importance, a more complete analysis of Tanzania's developmental gains would require one to consider this disease's devastating effect upon the hard-won progress in meeting the trained labour requirements which was referred to in the preceding paragraph.

26. Indeed, substantial improvements in the human capital stocks of both the Soviet Union and China occurred under market-suppressing Communist regimes. That the potential latent in this human capital was unleashed by marketisation in China in no way contradicts the argument. The fact that liberalisation alone did not generate an immediate reaping of the same potential in the former Soviet Union shows how complex are the relationships involved. Indeed, it has been argued that by bringing about a de-industrialisation of the FSU, liberalisation may end up producing a decumulation of its human capital. See Fan and Spagat (1993). Comparisons between Russian and Chinese economic traditions might also be illustrative of the themes of this article.

a more materially comfortable life are what is desired, then there is clearly a need for an appropriate fit between the societal base of human capital and the economic activities to be undertaken.

### Conclusions

This article has tried to suggest that human capital, understood not merely as a collection of formal skills but more broadly as a repertoire of material knowledge and attitudes that takes the societal form of culture, deserves more attention as a determinant of the rate of, and indeed the capacity for, modern economic development. It has related the stock of human capital, and the type of culture in the sense just used, to varying forms of social and economic organisation characterised by differing population densities, production systems, and degrees of organisational complexity. It has argued in favour of a more articulated approach than the 'modern' versus 'traditional' dichotomy common in development economics, and has suggested one reason why some societies have been able to achieve more rapid economic growth than others in the second half of this century.

This approach might appear to be a very pessimistic one with respect to the prospects for economic development in sub-Saharan Africa, since it suggests that Africa must inevitably progress more slowly than other parts of the developing world. However, the relative economic performance of Africa in recent decades is already a fact, and when one begins with realities, the argument can be seen as having relatively *optimistic* implications for the future. Just as Africa's output in the immediate post-war period may have overstated its relative position in the race for modern economic growth by failing to reflect important determinants of *developmental capacity*, so, it is argued here, will the lack of measured growth in recent decades be misread if one fails to take into account *changes* in that capacity.

For some countries, among which Tanzania can be included, absence of measured growth could be masking steady change in the human basis for future growth, including not only increasing literacy and larger numbers of skilled workers, but even more widely changed attitudes towards modern skills and practices.<sup>27</sup> Put simply, because they have overlooked the changes in practices, attitudes, and knowledge that were the concerns of missionaries and colonial administrators two generations ago, but that smacked too much of paternalism to be encompassed by a modern liberal world view, development economists have failed to take account of processes of change that were still in progress when Independence arrived. Even if growth in output has been disappointing,

---

27. Note again that I do not intend, in this article, to join the debate over appropriate indicators of achieved development. See again note 20, above.

the change in the country's collective human capital stock may have been proceeding steadily, laying a foundation for future growth. While Tanzania's anti-market policies almost certainly retarded growth in recent decades, its frontal approach towards modernisation may not have been quite as misguided. The consequences of that approach deserve more systematic scrutiny.

## References

- Berthelemy, J.C. and Morrisson, C. (1987) 'Manufactured Goods Supply and Cash Crops in Sub-Saharan Africa', *World Development* 15: 1353-67.
- Bevan, David, Collier, Paul and Gunning, Jan Willem (1989) *Peasants and Government: An Economic Analysis*. Oxford: Clarendon Press.
- Boserup, Ester (1981) *Population and Technology*. Oxford: Basil Blackwell.
- Bryceson, Deborah Fahy (1993) *Liberalizing Tanzania's Food Trade: Public and Private Faces of Urban Marketing Policy 1939-1988*. London: James Currey in association with Geneva: United Nations Research Institute for Social Development.
- Coulson, Andrew (1982) *Tanzania: A Political Economy*. New York: Oxford University Press.
- Coulter, John and Lele, Uma (1993) 'The Kilimo-Sasakawa-Global 2000 Project in Tanzania: A Mid-Term Evaluation Report'. Atlanta, GA: The Carter Center (mimeo).
- Fan, C. Simon and Spagat, Michael (1993) 'Human Capital and Long-Run Growth in Transitional Economies: Gradualism Versus Shock Therapy', unpublished paper. Providence, RI: Brown University.
- Inkeles, Alex and Smith, David (1974) *Becoming Modern: Individual Change in Six Developing Countries*. Cambridge, MA: Harvard University Press.
- Lele, Uma (1992) 'Can Technology Transfer and Macroeconomic Adjustment Sustain Africa's Agricultural Revolution Without an Agricultural Sector Strategy?', International Working Papers IW92-26. Gainesville, FL: University of Florida.
- Nelson, Richard and Winter, Sidney (1982) *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.
- Parsons, Talcott (1964) 'Evolutionary Universals in Society', *American Sociological Review* 20: 339-57.
- Putterman, Louis (1986) *Peasants, Collectives, and Choice: Economic Theory and Tanzania's Villages*. Greenwich, CT: JAI Press.
- Putterman, Louis (1994) 'Market Reform and Tanzanian Agriculture: Successes and Failures in a Decade of Liberalization', IRIS Working Paper 102. College Park, MD: University of Maryland.
- Sender, John and Smith, Sheila (1990) *Poverty, Class, and Gender in Rural Africa: A Tanzanian Case Study*. London: Routledge.
- Service, Elman (1962) *Primitive Social Organisation*. New York: Random House.

- Smith, Allison (1994) 'Rural Water Supply Development in Tanzania: A Case Study of Foreign Donor Policies', MA thesis, May. Providence, RI: Brown University.
- Therkildsen, Ole (1988) *Watering White Elephants*. Uppsala: Scandinavian Institute for African Studies.
- UNDP (1993) *Human Development Report 1993*. New York: Oxford University Press.
- World Bank (1991) *Tanzania Economic Report: Towards Sustainable Development in the 1990s*. Washington, DC: World Bank.