Development reconsidered: The African challenge

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The theory of economic development, when applied to much of sub-Saharan Africa, is found to be mis-specified both empirically and teleologically. The prevailing theory of economic development, fashioned out of the experience of economic transition towards industrialisation in the temperate climates, is alleged to fail to be empirically relevant to conditions in sub-Saharan Africa. Of equal importance, the normative precepts of the prevailing theory of economic development render it of dubious pertinence to societies in which the superiority of an urbanised and industrialised existence remains an open question. The more agrarian nations of Africa offer their own economic and physical reality that challenges the applicability of the conventional theory of economic development. External development assistance to these nations must be reconsidered in light of the conditions and purposes inherent in these agrarian states.

Keywords: economic development, sub-Saharan Africa, reconsiderations

Since the mid-1970s, the development community has paid special attention to the prospects for sustained development on the African continent, particularly in sub-Saharan Africa. Much serious thought has been devoted to the question of why many African countries were unable to make a successful transition to a modern economy in the way many countries of South and Southeast Asia already had (World Bank, 1981, 1983, 1984). Comparisons between Asia and Africa were frequent and often unflattering. Since the fall of the Berlin Wall in November 1989, and the attendant rush to assist the foundering economies of the former Soviet empire, there is fear that development assistance to sub-Saharan Africa will become the victim of not only donor fatigue but also crowding out.

The received wisdom of economic development in general, and agricultural development in particular, persists in the academic and donor communities. This traditional view of economic development envisions four stages (see Timmer, 1990). During the first stage, the emphasis is on institutional change, investments in new technology, the development of markets and the incentives they offer, and a major commitment to the improvement of rural infrastructure.

In the second phase, the agricultural sector is more closely linked with the industrial sector, there is continuing pressure to improve technology and incentives, and policy makers seek to improve factor markets to mobilise rural resources.

In the third phase, agriculture is successfully integrated into the nascent industrial economy. Urban consumers spend a smaller share of their incomes on
food, agriculture is under pressure to be more efficient, and rural labourers start to move out of agriculture into urban jobs. Productivity of rural factors of production often lags behind that of urbanised factors, and so political problems associated with income distribution may arise.

Finally, in the fourth phase, the journey is almost complete. Agriculture becomes a small and often insignificant share of the national economy, consumer expenditures for food fall further as a share of household budgets, urban unemployment creates pressure to retain labour in agriculture, and governments are likely to begin protecting agriculture as a way of life.

Two things about this sequence of events stand out. First, the theory is informed by the historical experience in Europe, especially that of England, dating from the late 18th century. This story is, above all, Anglo-Saxon history in the temperate climates of Western Europe and, to a lesser extent, North America.

Second, this received wisdom is aggressively teleological. Progress is, by definition, industrial in nature, and it is good and proper that the agricultural labour force — and the share of national income contributed by agriculture — continue to shrink as development occurs. Even the terminology, ‘development’, leaves little doubt as to the desired outcome. Few favour the opposite of development: stagnation, backwardness and ‘underdeveloped’.

The point here is not to challenge the received wisdom of development, for the reigning theory seems quite able to describe and explain recent history in many places. Rather, this paper explores whether this particular teleological construct is quite the universal theory we imagine it to be when it is applied to conditions in sub-Saharan Africa. While the theory may have been appropriate for Western Europe, North America and parts of the Pacific Rim, it is still an open question as to whether it is the pertinent theory for sub-Saharan Africa. The received wisdom of development may well have brought success to much of the currently developed world, but is it an appropriate construct for regions that have remained agrarian, poor and ‘underdeveloped’?

To ask the question in a different way, is it possible that the developed economies, which dominate so much of the world’s industry and trade, might block the path for others who seek a similar passage? If so, the received wisdom of development is a historically particularistic theory that cannot offer a coherent explanation of the current state of economic conditions in much of sub-Saharan Africa.

When the prevailing theory of development is transported from the countries in which it evolved to countries of sub-Saharan Africa, then the transferability of that theory ought to be given some thought. If the theory itself could become the focus for discussion, less time might be spent puzzling over the failure of countries in sub-Saharan Africa to follow the received wisdom. Instead, rather more time might be devoted to constructing a new theory of development.

What might this epistemological enquiry suggest about the development problem? In essence, it is inevitable that this enquiry would lead to a consideration of the very nature and structure of development theory. This would lead, then, to a careful assessment of the role of the core economic model, and of the auxiliary assumptions necessary to render that economic model empirically pertinent to sub-Saharan Africa. I turn to a brief exposition of this matter.

**On models, applicability theorems and development theory**

When considering the nature of development theory it is important to recall that
the economist's empirical task is to construct abstract representations of human processes that offer tentative but plausible explanations of observed behaviours. That process usually starts by making reference to an axiomatic structure of premises (or assumptions) and postulates (or propositions). Indeed, the core model of a particular discipline is what differentiates that discipline from others. Economists usually start with human behaviour under conditions of scarcity. We further assume rationality, self-interest (which is not the same as greed), and the desire for improvement in one's personal circumstances. There are other aspects which might be appended, but this description is a reasonable statement of the minimal set of assumptions thought pertinent to human behaviour.

This core model can, of course, be used to generate testable hypotheses. The pertinence of these derived hypotheses will often be improved if other characteristics are appended to the core model. For instance, self-interest can be expanded, that is elaborated, to encompass the interests of others for whom one feels particularly close. We see that self-interest in the expanded version of the model extends to one's children, one's spouse, one's cousins, or the members of one's village.

The core model that speaks only to self-interest in the narrowest sense, once it is augmented with other conditions, has an improved chance of fitting a particular empirical situation. While the core model of self-interest may be quite applicable to the recluse living on a South Pacific isle, it will not be particularly apposite to an individual enmeshed in a South Pacific village. The core model is not wrong for this more social setting; it is simply incomplete. The very act of annexing several other conditions can then render the basic model both more reasonable, and more plausible. We then know that the elaborated model will be better able to generate tentative and testable hypotheses about behaviour.

A full theory of human behaviour therefore consists of two parts: a core model that is tautological in nature (axiomatic); and a set of applicability theorems that allow for the mapping of the core model into the particular empirical setting of interest to the researcher. We refer to this augmented model – with its applicability theorems (auxiliary assumptions) – as an economic theory. This theory is then capable of rendering empirically pertinent hypotheses about observable phenomena of interest to the economist. We can think of it as:

Economic model + applicability theorems $\iff$ economic theory

The agricultural transformation referred to earlier, with its four stages, constitutes a theory of development. It is a constellation of if-then propositions that link particular actions (or policies) to particular human behaviours, and ultimately to certain outcomes. If the right institutional change is introduced, and if new technology is introduced, and if markets are structured in particular ways, and if certain investments are made in rural infrastructure, then agriculture will 'get moving'.

Once this happens, if agriculture can be properly linked with industry, if the proper incentives are introduced to stimulate a healthy agricultural sector, and if factor markets can be improved to mobilise rural resources, then agriculture can become a 'contributor to growth' in the larger economy. The full integration of agriculture into the macroeconomy will happen if there is a decline in the share of consumers' budgets spent on food, if agriculture is exposed to the same competitive pressures operating in the urban sector, and if lagging rural labour productivity can be avoided.
This theory of development is thus dependent upon the axioms from the core of economics (the model), but it is substantially augmented by a set of applicability theorems derived from the empirical conditions that were necessary to create the theory in the first instance. The theory of economic development was built up over time by the careful identification of the empirical conditions present as agriculture developed in Western Europe and North America since the mid-19th century. It became a theory precisely because it contains logical if–then propositions with some empirical legitimacy.

Although the theory of economic development is grounded on the core model from economics, it is dominated by the applicability theorems that append that minimal set of axioms and postulates in the model. To say that the accepted theory of agricultural and economic development may not fit the conditions in sub-Saharan Africa says nothing about the core model at the heart of neoclassical economics. Rather, agnosticism about the theory of economic development speaks simply to the appropriateness of the set of applicability theorems that have been appended to the core model in the process of building up the currently accepted theory of development. The core neoclassical model is not a theory of development. We do not have a theory until the necessary applicability theorems have been appended to the core. Development of a theory is a continual process of selective accretion to the core tautological model.

The critical role of applicability theorems to the full articulation of a theory of development becomes obvious when the empirical conditions so vital to that complete theory – those empirical conditions underlying its essential structure – differ markedly from the new empirical reality into which the theory is to be projected. Clear explanation of cause and effect is impossible if the empirical manifestation of the reigning theory of economic development is seriously at odds with some new empirical setting. That is the problem to be addressed next.

Does the theory fit the circumstances?

The enigma about development in Africa arises, in part, because of the fallacy of composition inherent in discussions of Africa as a single entity. This observation is certainly not new, but it is pertinent to the previous discussion of models and applicability theorems. There are, in fact, five Africas of interest to the development community.

First is the region of North Africa with its Arab and Muslim influence. Second, West Africa is characterised by abundant rainfall and smallholder cultivation. Third, Sahelian Africa features extreme aridity and is largely inhabited by pastoralists. Fourth is the region of Central Africa with thick jungles and bounteous minerals. Finally, the countries of East and Southern Africa have the common features of wild animals, nature parks and mixed agriculture. These distinctions are, of themselves, somewhat arbitrary but it is clear that the prospects for African development cannot be comprehended if this large and varied landmass is treated as some undifferentiated whole.

We must also look carefully at the received theory of development in locations other than Africa that seem, at first glance, to be more homogeneous. There is mounting evidence that the theory may not even fit those circumstances. For instance, Timmer writes:

The failure of agricultural productivity per worker to rise as fast as national productivity in these three countries [Italy, Japan, the USSR] might thus be seen as an
early signal that the patterns in the less developed countries seeking to start down the path of modern economic growth might be significantly different from the historical path followed by the Western countries (Timmer, 1990, p. 55).

Citing research by Bairoch, Timmer notes that:

Only Italy in 1840 had a lower productivity level than that of Africa and Asia in modern times. The gap in agricultural productivity on average between European countries beginning their industrial revolutions and Africa and Asia is . . . about 45% (Timmer, 1990, pp. 55-56).

Then, quoting Bairoch (1975, pp. 40-41), Timmer further observes:

A gap of about 45% is sufficiently wide for us to be able to assert that agricultural conditions in the currently developed countries before the beginning of the industrial revolution must have been very different from those of the underdeveloped countries of Asia and Africa today (Timmer, 1990, p. 56).

The received theory of development might thus be quite inappropriate to problems of development outside the areas of the world whose empirical conditions gave the theory its applicability theorems, its structure and thus its empirical propositions. To consider this possibility is to inquire into the nature of the applicability theorems that gave the conventional theory its empirical relevance. How does one begin to think about a theory’s applicability theorems? We might start by differentiating the 48 African countries by those traits that seem pertinent to a more coherent theory of economic development. That is, we identify those countries that might be called agrarian in nature. For present purposes, a country that in 1991 had more than 20% of its GNP arising in agriculture and, at the same time, less than 20% of its GNP arising in industry would be considered ‘agrarian’. Eighteen African nations fit this profile (see Table 1).

These 18 nations are spread rather evenly among the regions of Sahelian Africa, Eastern/Southern Africa and Central Africa. Three countries are drawn from West Africa. None of the North African countries is considered agrarian by this definition. In what ways do these 18 agrarian African countries differ from the remaining 30 African countries that we might regard as mixed economies? Data for the agrarian and mixed African countries, along with selected agrarian countries from Asia and Latin America, can be compared (see Table 2).¹ These latter

¹In these latter two regions, the definition of agrarian does not depend on the fraction of GNP arising from agriculture and industry. Rather, these countries were chosen on the basis of the acknowledged importance of agriculture in their economy, regardless of the industrial share of GNP. The Asian countries are Bangladesh, China, India, Indonesia, Nepal, Pakistan, Philippines and Sri Lanka. The Latin American countries are Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Uruguay.
Table 2 Sample of economic data for selected countries of Africa, Asia and Latin America

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Agrarian Africa</th>
<th>Mixed Africa</th>
<th>Agrarian Asia*</th>
<th>Agrarian Latin America†</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNP per capita, US dollars, 1991</td>
<td>274</td>
<td>1142</td>
<td>408</td>
<td>1207</td>
</tr>
<tr>
<td>Official development assistance per capita,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US dollars, 1989–91</td>
<td>55.3</td>
<td>63.1</td>
<td>14.6</td>
<td>45.9</td>
</tr>
<tr>
<td>Official development assistance as per cent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of GNP, 1989–91</td>
<td>25.0</td>
<td>8.4</td>
<td>4.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Debt service as per cent of exports, 1989–91</td>
<td>26.7</td>
<td>23.3</td>
<td>24.9</td>
<td>32.1</td>
</tr>
<tr>
<td>Debt service as per cent of borrowing, 1989–91</td>
<td>60.5</td>
<td>117.6</td>
<td>93.4</td>
<td>149.1</td>
</tr>
<tr>
<td>Current borrowing per capita, US dollars,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989–91</td>
<td>12.3</td>
<td>69.5</td>
<td>21.3</td>
<td>88.6</td>
</tr>
<tr>
<td>Average annual per cent GNP growth, 1980–91</td>
<td>2.5</td>
<td>3.0</td>
<td>5.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Food production index per capita (1979–81=100)</td>
<td>94.1</td>
<td>90.6</td>
<td>111.5</td>
<td>97.9</td>
</tr>
<tr>
<td>Cropland per capita, ha, 1991</td>
<td>0.3</td>
<td>0.3</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Per cent of cropland irrigated, 1989–91</td>
<td>4.5</td>
<td>10.0</td>
<td>38.6</td>
<td>11.2</td>
</tr>
<tr>
<td>Average annual fertilizer use, kg per ha of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cropland, 1989–91</td>
<td>18.0</td>
<td>37.0</td>
<td>105.8</td>
<td>68.9</td>
</tr>
<tr>
<td>Food aid in kg of cereals per capita, 1988–90</td>
<td>7.9</td>
<td>11.3</td>
<td>4.9</td>
<td>18.1</td>
</tr>
<tr>
<td>Agricultural labour force as per cent of total labour force, 1991</td>
<td>77.3</td>
<td>55.4</td>
<td>61.4</td>
<td>35.7</td>
</tr>
</tbody>
</table>

* The agrarian Asian countries are: Bangladesh, China, India, Indonesia, Nepal, Pakistan, Philippines and Sri Lanka.
† The agrarian Latin American countries are: Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Uruguay.


countries are included here to give the reader unfamiliar with African conditions a somewhat better perspective on the agrarian and mixed African economies.

From the data in Table 2, it is apparent that agrarian African nations have very low GNP per capita and a high level of official development assistance per capita. Development assistance is also a high percentage of GNP. Debt service as a per cent of exports is rather modest but, as a per cent of total borrowing, debt service is very low. These agrarian states thus seem to be avoiding the trap of devoting much of their new credit to the service of existing debt.

The agrarian African nations are not big borrowers per capita and, compared with the other 48 nations in Table 2, they enjoy a rate of growth in GNP that is quite consistent with the others in Table 2. The index of growth in food production is about average, compared with other countries, as is the case for cropland area per capita. The agrarian nations of Africa differ in these respects: they have a high percentage of total labour force engaged in agriculture; irrigation is not prevalent compared to their cohort in Africa or elsewhere; and fertilizer use is very low. They are somewhat modest recipients of food aid.

Directly compared with their African neighbours, these 18 agrarian nations are somewhat poorer in terms of GNP, they are three times more dependent on development assistance (as a per cent of GNP), they are positively frugal in terms of debt service as a per cent of borrowing (as well as in total borrowing per capita), and they use half of the fertilizer on lands that are only half as likely to be irrigated. These conditions aside, the data suggest that these 18 nations are not drastically different from many of their neighbours.

Does the received theory of development pertain to them? Does it even pertain
to their African neighbours? Will these African agrarian nations, not to mention many of their continental neighbours, become highly urbanised and industrial? Do their leaders and citizens aspire to this sort of future? More important, if they aspire to a somewhat more agrarian future, are they thereby destined to be classified under the sobriquet 'underdeveloped'?

This question is pertinent because, their relative poverty aside, these nations do not seem seriously deficient in other economic indicators. The mixed African economies (the other 30 African nations) receive more official development assistance per capita, their debt service is almost 120% of current borrowing (twice that of the agrarian nations), their current borrowing per capita is almost six times that found in the agrarian nations, and their index of food production lags behind that of the agrarian nations in Africa (see Table 2). Most telling, the mixed African economies irrigate twice the proportion of their cropland and use twice the fertilizer per unit of cropland as do the agrarian nations, but they still do not appear to have an enviable level of performance in the agricultural sector.

The point of these comparisons is to suggest that we are considering two quite different African economies here. One of the economies is agrarian, and it is certainly poor. But is it performing all that badly, given its technological and ecological conditions? The other economy is more industrial, with higher GNP, but it clearly has some lingering economic problems. The implication here is that the development prescription for the one group of countries must be quite different from that which is appropriate for the other. There is a different set of applicability theorems and hence a different development path appropriate to these two groups of countries. The received theory of development must be differentiated to account for the very different empirical realities of sub-Saharan Africa.

That the empirical conditions in sub-Saharan Africa call into question the relevance of the traditional theory of economic development still leaves open the more fundamental aspects of that theory, namely its teleology. To that I now turn.

Is the teleology tenable?

Economic development is a process by which an economy is transformed from one that is dominantly rural and agricultural to one that is dominantly urban, industrial and service-oriented in composition. The objectives of the process can be usefully categorised as increased social wealth, equity and stability. But because these objectives require a diversification of the economy away from agriculture (no high-income, equitable, stable nations have agriculture as their dominant activity), the process is one of major structural transformation (Mellor, 1990, p. 70).

Following the prevailing view, expressed so well here by Mellor, practically all African economies are seriously underdeveloped. While the agrarian nations are almost exclusively agricultural – and hence, by the common definition, more underdeveloped than their moderately industrialised neighbours – it is less clear that the agrarian nations are any less stable and egalitarian than the remaining 30 nations of Africa, or the 18 Asian and Latin American economies listed in Table 2. Indeed, political difficulties in Nigeria, Côte d'Ivoire, Sierra Leone and Kenya in the 1990s suggest that stability may have little to do with the usual economic indicators of development.

The fundamental question remains paramount for policy guidance: does the 'end state' of development – that is, a highly industrialised and highly urbanised economy in which agriculture is virtually unnoticed and economically insignificant –
serve as the sole compelling and pertinent teleology for most of Africa? Is there but one possible outcome? Are all countries to wind up urbanised and industrialised? Is it possible that there are paths other than that followed in Western Europe? Can the term ‘developed’ be applied only to economies that are urbanised and industrialised? By tradition, in the academic and donor community, this is the case.

If a country with less than 10% of its labour force engaged in agriculture is regarded as developed, most nations of Africa will remain underdeveloped into the 21st century. The share of the labour force in agriculture is not likely to fall from the average of 63% for Africa as a whole, in the mid-1990s, to less than 10%. Will they be regarded as developed if that percentage falls to, say, 40%? Does development require that it drop to 20%, which was the European and Japanese average in 1970?

There is an obvious problem. As long as the definition of development is structural in nature, that very definition, that concept of economic development, is driven by the metaphor of the Industrial Revolution in Western Europe at the turn of the 19th century.

Economists, perhaps inadvertently, have come to regard a developed economy as superior to an undeveloped one. That judgment is couched in seemingly objective statistical evidence of higher income, increased urbanisation, more industrial workers as a share of the total and a better investment climate.

We may insist that it is the leaders of these nations who seek the Holy Grail of development and that economists are really quite neutral and scientific about it. But this does not obviate the reality that the theoretical construct we use to prescribe and describe development is fraught with its own ideological components. Higher per capita income might not be a true measure of individual well-being. A highly urbanised setting might not be superior to one that is rural.

We may remain silent as to whether or not societies should develop. But, having done so, we are not free thereafter to call them underdeveloped or backwards if they should choose to follow a different path. There is no scientific basis to pronounce a developed economy as superior, or Pareto-preferred, to one that is not developed. The mere fact that the prevailing view of development is widely shared among Western-trained economists and political leaders does not, in any way, remove that teleology from the domain of value judgements.

There are two aspects of the so-called development problem in Africa: (1) the institutional problem; and (2) the existential problem. The institutional problem speaks to the role that a nation's legal and social infrastructure play in determining feasible courses of action in particular situations. The existential problem speaks to the empirical reality in which a particular nation state finds itself in terms of location, climate and natural resource base.

The institutional problem

If we consider the development problem in rather stark terms, it is possible to envision a production possibilities frontier (PPF) showing the technically feasible boundary for the production of industrial goods and agricultural commodities (see Fig. 1). The location of this frontier is a combination of at least two factors: (1) the physical endowment of a particular nation-state; and (2) the technological artefacts.

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2In Europe, between 1970 and 1990, the share of the total labour force in agriculture fell by more than half (from 20 to 9%). In the USA it fell exactly by half (from 4 to 2%). In Japan the drop was more precipitous, falling from 20 to 6% over this same period.
that are brought to bear on that physical endowment. For instance, panel (a) of Fig. 1 shows a PPF for a nation that is reasonably well situated for industrial pursuits; it has good access to sea routes and a long tradition of entrepreneurial activity. A major river produces adequate water for agricultural production.

However, imagine a situation in which irrigated agriculture were not prevalent in this hypothetical country. If that were the case, panel (b) rather than panel (a) in Fig. 1 might more accurately depict the situation. The difference between points A and B in the two panels is a reflection of the investment in irrigated agriculture, as well as the other infrastructural developments that are part of its modernising agricultural sector.

The location of the PPF in Fig. 1 is also dependent on something else. The nation’s institutional set-up has a profound impact on its production possibilities. If crime, sloth and other detrimental forces were widespread, then the locus I–I’ would be relevant. In essence, the PPF represents the production possibilities frontier, assuming institutional arrangements are not seriously deleterious to the general economic condition. In welfare theory, the PPF is usually abstracted from the institutional domain in which the economy must function. In consequence, we too often forget about the fundamental role that institutions, a collective good, play in defining the nation’s production set (Bromley, 1989, 1993; Bromley and Chavas, 1989).

Figure 1 reminds us that ecological conditions and technology are but a part of the story of the economy. In one sense, the process of development is often concerned with ‘getting the rules right’ such that the economy moves from the locus I–I’ to the production possibilities frontier C–A (Bromley, 1993). Notice that ‘getting the rules right’ also plays a profound role in shifting the PPF to the northeast, which indicates better technology and better infrastructure.

Efforts to address the development challenge for the mixed African economies

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*The difficulties created by civil turmoil pose a serious threat to any economy. In panel (a), such actions tend to render the locus I–I’ more pertinent than the PPF given by C–A. The locus I–I’ is itself a production possibility frontier if the current institutional structure is taken into account. In that sense, it (I–I’) is no less relevant to economic analysis than is the PPF (C–A) in panel (a).*
must start by recognising the important role of the locus I–I', which is referred to here as the institutional feasibility locus (IFL). One might think of the IFL as the institutionally pertinent PPF.

The relevance of the IFL serves to remind us that the process of development as traditionally conceived is not a natural state of affairs, but is rather something that must be purposefully set in motion and sustained with vigilance and collective commitment. It is hard work to create the circumstances in which a nation-state might move closer to its largely hypothetical production possibilities frontier. Indeed, development, as we have come to understand that idea, must often be imposed on countries. What else can one conclude from the experience with structural adjustment programmes in many countries?

Structural adjustment programmes are precisely concerned with moving nations closer to the imagined PPF through the expedient of eliminating the institutional impediments that keep it on the IFL. More correctly, structural adjustment programmes move the IFL to the northeast until, when the rules are finally right, the IFL becomes precisely coincidental with the PPF.

The existential problem

So far we have considered countries that might be regarded as reasonably well endowed in terms of their physical and locational aspects, of their existential situation. For agriculture, this can be taken to mean that they have favourable rainfall patterns or irrigation is feasible. This notion of endowment can be extended to physical attributes, such as access to ocean shipping, fertile soils, etc. These nations have a moderate chance at economic progress if they can but get their institutional climate conducive to entrepreneurial activity. But are there countries for which this is not the case?

The 18 agrarian nations in Africa have a setting (a ‘situational endowment’) that is much less favourable to the activities that are central to the traditional idea of development. Twelve nations in Africa are landlocked and nine of them are agrarian states as defined here. Only Botswana, Zambia and Zimbabwe are landlocked nations that fall in the mixed economies group. Of the 18 agrarian nations, nine are landlocked, seven are arid or semi-arid, and 10 are ‘small’.

Nine countries have two of these three traits. Burkina Faso has all three; it is arid, small and landlocked.

Being small, landlocked and arid (or semi-arid) cannot but have profound impacts on the nature and position of a nation’s production possibilities frontier. Being landlocked and arid, but large, opens up economic possibilities that are not there when constrained by national boundaries. Being arid and small, but having access to oceans, opens up prospects for development not available to an arid and small landlocked nation. And being small and landlocked, but well endowed in rainfall, would relax the constraint of extreme aridity.

In Fig. 2, a stylised PPF is drawn for a hypothetical agrarian African nation that is arid, small, and perhaps without access to oceans for trade. This PPF is labelled ‘AE’ for agrarian economies, which is in contrast to the PPF for the mixed economies of Africa (‘ME’). The institutional feasibility locus (IFL) is superimposed from Fig. 1 to illustrate something implicit in Table 2. Even if the agrarian nations did everything right in an institutional and technical sense, it would perhaps

\[\text{Being a ‘small’ nation is, of course, arbitrary. I have simply regarded as small those that are less than half the size of Kenya, itself a rather small African nation.}\]
be difficult to move out in production space to the vicinity of the IFL for the mixed economies.

The development 'problem' for Africa looks different if the status quo is found to be institutionally determined (as in some of the mixed economies), rather than existentially determined. Even this distinction is somewhat arbitrary. For instance, if Senegal, the Gambia, Guinea-Bissau, Mali, Burkina Faso, Ghana and Benin were one nation rather than seven, it would have profound implications for a new production possibilities frontier.

The development challenge is very different when one is working on an institutional feasibility locus that offers room for material improvement. On the other hand, when a nation-state is boxed in by a PPF such as AE in Fig. 2, the future of development is probably bleak.

**Whither African 'development'**?

The accepted idea of economic development has operated with something like Fig. 1 in mind. There is a PPF that is rather generous in terms of the status quo, and the development problem is two-fold: to augment that production possibilities frontier through technical change; and to undertake structural adjustment programmes that will move the IFL outwards towards the PPF.

For parts of agrarian Africa, however, the PPF is both unforgiving in its position, and extremely difficult to move very far to the northeast (see PPF labelled AE in Fig. 2). More critical perhaps, the movement along the axes in Fig. 2 is likely to be asymmetrical. Thus, while it may be possible to extend the horizontal intercept out,
by means of careful investments in agriculture, it seems improbable that the PPF (AE) can be moved up the vertical axis very far, if at all.

By Western standards, some nations in Africa face the prospect of continued relative poverty. These nations perhaps face a future of being called 'underdeveloped' in terms of a teleology that is not of their choosing, and that is loaded with normative connotations from alien cultural precepts.

It remains to be proven that pastoralists and simple cultivators are somehow deprived in their essential existence in comparison with the urban apartment dweller of Lagos. Nothing in economic theory can prove that assertion. To equate level of income with happiness is simply to make a value judgement. To equate 'range of choice' with happiness is equally loaded.

This is not uncontroversial ground I am traversing. Who, it might be insisted, would deign to defend life in dirt-floored huts? There are two answers, one metaphysical and one empirical. The empirical response, based on earlier arguments, is that one need not be forced into the defensive role by explaining that which is largely ineluctable. Guilt is not the inevitable companion of those who would describe reality and necessity.

As for the metaphysical side, where is it written that all of humankind must, in order to be happy, reside in concrete jungles called cities? Where do we go for proof that wage labourers, performing at whatever task the market has given them, are better off than the African pastoralist sitting under a baobab tree contemplating the wind?

It is arguable that the idea of the coherent nation-state is still to take hold in some parts of sub-Saharan Africa. It follows, therefore, that the purposes of the future are not considered as collective concerns. And so it also follows that the idea of economic development as we understand that term has yet to take hold.

The long-run, sustainable success of economic assistance programmes still requires, as a precondition, the existence of a coherent nation-state. Until the relatively young nations of Africa structure themselves internally so that discourse about the purposes of the future is possible, sustained economic progress will be most difficult to achieve. In the absence of this structure, many economies will remain stuck on the institutional feasibility locus well inside the technically feasible PPF.

Nation-states must create institutional arrangements (incentives and sanctions) that will redefine the domains of choice for atomistic economic agents. Some of these incentives and sanctions will come from the arena of volitional choice, that is markets. Others will necessarily come from the arena of compulsion, whereby the nation-state has to create the legal foundations of capitalism. Both will constitute a new behavioural arena for economic agents, which has the purpose of improving the human condition (Bromley, 1993). Until these institutional preconditions for a vibrant economy are in place, much potential economic surplus will simply be dissipated in high transaction costs (Bromley and Chavas, 1989).

Past efforts to provide assistance in Asia have largely focused on coherent nation-states that had made some minimal commitment to the idea of development as an industrialising process. Most of these nation-states were mature survivors of colonial interventions. Some of them had mounted national armies to repel external aggressors (as opposed to regional armies engaged in civil war). Most of these nations depended upon the careful management of scarce water to cultivate a food grain that was the basis of the food supply. These sedentary societies had highly elaborated institutional arrangements for influencing and controlling the actions of its citizens.
Sub-Saharan Africa presents a picture differing from almost all the attributes described above. In essence, the very idea of economic development has to be redefined so that it fits the empirical circumstances found in sub-Saharan Africa.

The necessary first step is to abandon the automatic presumption of economic development. As outsiders, our purpose in collaboration with the nations of sub-Saharan Africa needs to be redefined so that it occurs under different presumptions. Are we there to cause economic development, or are we there to assist with particular problems for which we have special expertise? If the latter, we need not undertake these activities only on the condition that particular nations will someday choose a path that we have defined as economic development. We will be under no illusions as to why we as donors are there, thus making it easier to focus attention on the real problem of the moment. Is groundwater being depleted? Are pesticides getting into drinking water? Are children exposed to unnecessary hazards? Are crop diseases ravaging fields? Are post-harvest losses larger than they might be? Is land ownership an impediment to productivity or equity?

The foreign assistance community abounds with expertise to assist with each of these problems and many more. That assistance is part of a long-run commitment to technical co-operation with a number of nations and their citizens in most parts of Africa. Such assistance need not presume development, nor should it be justified on those grounds. It is quite enough to justify such assistance on the grounds that it helps individuals deal with their difficult circumstances.

As this technical co-operation progresses, some nations will seem to embrace the traditional idea of development, while others will not. When the idea of development is endogenised and acted upon by a few nations, we will begin to see some of the changes now familiar in Asia and Latin America. Prior technical assistance will provide an enhanced plateau from which further development might proceed.

For those nations that fail to embrace the prevailing doctrine of economic development, technical and financial assistance will not have been in vain. Certain conditions, and certain lives, will have been improved. Beyond that, little else may have happened. But it is not for us as outsiders to denounce this outcome, or to despair that we have been unsuccessful in our economic development assistance. For we were never really giving development assistance. We were simply helping to solve particular problems, in particular places, that affected particular people.

The history of the idea of economic development suggests that we will certainly fail if we persist in believing that we can bring ‘development’ to much of sub-Saharan Africa. Our idea of economic development must be reconsidered and augmented with the companion idea of gradual economic transitions. Each nation-state will adopt its own particular version of what it regards as development. Since the mid-1960s, outsiders have told African nations what constitutes economic development, and what they must do to achieve it. Perhaps the time has come to experiment with programmes in which African nations figure out what they want and when they want it. Perhaps it is time for them to determine the purpose of their future. We should be ready when they call us. Indeed, we might even help them in that determination. But we should go quietly and with much humility about the alleged benefits of modernity and the ‘development’ that caused it.

References