

Hofmeier, Rolf

Article — Digitized Version

The political economy of transport projects

Intereconomics

Suggested Citation: Hofmeier, Rolf (1980) : The political economy of transport projects, Intereconomics, ISSN 0020-5346, Verlag Weltarchiv, Hamburg, Vol. 15, Iss. 2, pp. 94-99, <https://doi.org/10.1007/BF02928586>

This Version is available at:

<https://hdl.handle.net/10419/139669>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

traffic facilities in the Third World and for consultation and cooperation with due regard for the different starting positions of the developing countries. The claim of the developing countries that their air services are – at least in the initial phase – entitled to protection as infant industries has thus once more been acknowledged. It could form part of a possible air transport development strategy for these countries such as has still to be evolved.

There are other reasons beside this joint statement why one need not take too gloomy a view of the future North-South relationships in air transport. Western airline companies have been striving for some time and with increasing success to convey administrative, organizational and technical know-how of air traffic operations to their Third World partners – in francophone Africa, for instance, and also in Zambia and Malaysia. International organizations like the World Bank group are providing substantial support in

the form of finance for new airport projects, and western consultancy firms are giving advice on planning, organization and administration. The Third World states do not have to ask for assistance and support for their efforts to increase the efficiency of their transport systems. Outside help has been forthcoming for a considerable time in the course of the practical everyday cooperation.

So there is a very real chance of avoiding drastic and abrupt changes in international aviation. The nations with an established place in air traffic can determine the pace of the ongoing adjustment processes by holding out a helping hand to the many developing countries as yet unable to stand up to competition in this sector of the transport industry and offering concessions where they serve the purpose of improving the economic situation. There is a great deal of evidence showing that they are well aware of this chance.

AFRICA

The Political Economy of Transport Projects

by Rolf Hofmeier, Hamburg*

The UN General Assembly has designated the 1978-1988 period as a Decade of Transport in Africa to draw attention to the immense efforts that are – in an internationally coordinated fashion – still needed in this continent. What contribution to Africa's social and economic development may be expected from major rail and road projects?

There can be no doubt that significant advances have been made in Africa during the last two decades in improving all types of transport, but the rate of progress has varied tremendously from country to country. Africa as a whole certainly still lags far behind all other continents with regard to the penetration by transport arteries. Large tracts of land are without adequate communications with the outside world; none, it is true, are any longer cut off completely, but low standards and high costs of transport on the existing routes have, in practice, often the same effect, at any rate for long periods of the year.

New trunk roads and rural feeder roads have been built on a significant scale in almost all countries – and

railway lines as well, though to a more limited extent –, but maintenance and operation of existing routes does often no longer match the demands made on them today. Many secondary roads in the countryside are in a far worse condition than they were in the early sixties, and even bitumenized trunk roads are in many countries being neglected; the efficiency of many national railway systems has deteriorated, in parts seriously. The result is that the rehabilitation of already existing traffic installations has become a cardinal feature of various international development aid commitments in the transport sector. This reflects clearly, how utterly inadequate the available personnel and finance resources are in many states to keep the existing and any additional transport infrastructure properly maintained. The general desire for the

* Institut für Afrikakunde (Institute for African Studies).

creation of new high-grade arterial links is certainly understandable, but right now it is equally important to preserve the existing facilities and make the best possible use of them.

There is no consensus, even not among economists and geographers specializing in transport questions, about the precise nature and intensity of the causal connections between an improvement of the transport services and the general socio-economic development in developing countries¹. The realization of certain transport programmes may have widely differing effects²:

- As direct positive stimulants they may trigger off social and economic development over a wide field or
- by providing prerequisites but failing to impel farther-reaching effects they may be of a purely permissive and hence neutral character or
- they may even have negative effects insofar as excessive investment in transport may divert scarce financial resources from other productive outlets and thus retard the overall growth of the economy. Improved communications may strengthen the pull-effect of economically more advanced areas, with the negative effect – at least from a regional point of view – of denuding the relatively less developed parts of a country.

Particular transport investments may thus on the one hand create as yet non-existent preconditions which are necessary for a more comprehensive general economic development, or can, on the other hand, be a necessary response to a development dynamism sparked off by other forces and calling for additional transport services. In the latter case the extension of the transport sector does not initiate any

new development but arises rather as a consequence from the play of other forces. A similar dispute stems from the conflict – so often to be observed in all developing countries – between the demand for high-standard improvements of the existing arterial links and for a larger and denser network of feeder roads of a limited technical standard in the vast rural areas of African countries.

The means for a comprehensive socio-economic assessment of various conceivable programmes for the improvement of transport sectors continue to be most unsatisfactory, although the methods for the evaluation of the economic criteria to be taken into consideration at the single-project level are being constantly refined. The direct and indirect effects are such that they can only to a very limited extent be isolated and identified in respect to particular transport schemes, the more so as they appear only gradually over a prolonged period. Besides, different groups of persons will judge and decide on transport projects from quite different points of view.

Assessment of Transport Projects

Investment decisions by international development aid and finance institutions are usually based on an economic appraisal by means of cost-benefit analysis in its various versions. They are for the most part confined to an assessment of quantifiable factors which are more or less directly attributable to the particular projects. Various methodological refinements are nowadays brought into play in an attempt to cope with different repercussions, for instance in regard to the distributive effects of a project, or in the case of rural road systems to allow for the probability of incremental project-induced agricultural production³. All the other important and far-reaching effects of transport schemes are, however, commonly ignored or greatly underrated in economically-oriented project studies; they are, above all, incapable of giving due attention to the political-strategic importance of major transport projects.

Transport geographers are rarely employed in transport planning and decision-making although their work can, combined with an economic-historical approach, provide important information about the longer-term effects of various means of transport on the spatial and sectoral structures and socio-economic conditions of the respective countries⁴. This kind of analysis reveals the immense impact of large transport schemes for the entire economy; they can have a crucial influence on many other structural developments. Various individual studies have,

¹ The present state of the discussion is clearly indicated by the essays in B. S. Hoyle (ed.): *Transport and Development*, London 1973. Cf. also R. Hofmeier: *Transport and Economic Development in Tanzania*, Munich 1973.

² Cf. H. L. Gauthier: *Geography, Transportation and Regional Development*, in: *Economic Geography*, No. 46 (1970).

³ This kind of economic assessment of transport projects is evident in a large number of feasibility studies for specific single projects. The methodological discussion has become very specialized. A practical survey of the criteria customarily applied to project studies by the World Bank is given by A. H. Adler: *Economic Appraisal of Transport Projects: A manual with case studies*, Bloomington-London 1971.

⁴ A – by now classical – study of this kind is E. Taaffe, R. Morrill, P. Gould: *Transport expansion in underdeveloped countries, a comparative analysis*, in: *The Geographical Review*, No. 53 (1963), p. 503-529. Similarly designed case studies are to be found in R. Hofmeier, op. cit.; B. S. Hoyle: *Transport and Economic Growth in Developing Countries: The Case of East Africa*, in: B. S. Hoyle (ed.), op. cit., p. 50-62; W. R. Stanley: *Transport Expansion in Liberia*, in: *The Geographical Review*, No. 60 (1970).

however, shown convincingly that new transport projects have nowadays far less decisive overall effects than the first railways which opened up various African countries decades ago; in this respect it is crucial at what point in history a country is opened up or existing rudimentary transport facilities are improved. It has also emerged clearly from historical and geographical studies of the transport services in Africa that the development of the transport sector must not be left to the free play of market forces, because cumulative agglomeration effects would, in the course of time, induce a progressive bias towards dualistic and heterogeneous regional – and subsequently also sectoral and socio-economic – structures. Such tendencies must be countered by a long-term transport policy; the infrastructure of transport must be planned with a view to the promotion of regional balance and economic integration, which help to avoid undue internal strains and maintain a political equilibrium⁵. This kind of transport strategy calls, however, in some cases for a significantly different orientation than that indicated by purely economic criteria which by their very nature cannot make adequate allowance for the overall long-term structural effects.

The increasingly scientific methods used in project studies seemingly allow a quantitative measurement of the total effects of all conceivable influences, but in fact most decisions on major transport schemes – by no means in Africa alone – are ultimately taken at a general political level. Depending on the situation in a given concrete case this may be assessed either an advantage or a drawback. In certain instances it is imperative that an all-embracing long-term political strategy should prevail over exercises in economic arithmetics which always tend to parsimony. On the other hand, costly transport schemes hold a special attraction for many politicians as evidence of governmental zeal and because they are usually also popular. They may, however, entail a risk of scarce resources being squandered on prestigious projects which do not make economic sense. Project studies undertaken to compute the economic benefit fulfil, of course, an important function in that they forestall grossly arbitrary decisions of this kind.

Historical Development of National Networks

As far as the general aspects discussed so far are concerned, the problems of transport planning and transport sector development are more or less the same in all countries of Africa; in regard to concrete advances in extending national transport systems,

however, there already exist considerable differences between various countries and groups of countries. The typical general feature of the transport policies of the colonial powers in all African countries was the opening up of the immediate hinterland of a few seaports, at first mainly by rail and later also by road-building. The coalescence of the various isolated traffic lanes inside the individual colonies and, later, independent states was a slow and gradual process; in the end, it resulted in more or less coherent and integrated transport systems. Under colonial rule and after independence it was the principal aim of transport policy to serve local needs of the individual countries, in fact frequently, only of a few more developed regions. Larger connected transport systems extending over several countries were usually not a practical proposition as is shown clearly by the large number of unconnected national rail networks with different gauges and technical systems (brakes, couplings) still existing in the continent and, less easily discernible, by the arterial road systems. Incipient moves towards interstate transport grids were made only in a few regions where one colonial power ruled over several adjacent countries (more especially in the Maghreb, East Africa, and Central and Southern Africa, whereas in French West and Equatorial Africa they remained rudimentary). In the immediate post-independence phase these first steps towards cooperation slackened – apart from a few exceptions –, because each new national state focused at first on the urgent needs in its own country.

For every young state it was bound to be an important aim of policy to promote and consolidate the national integration of the economic and political-social spheres, since the colonial past and arbitrary boundaries gave the individual countries little cohesion and the development of the physical infrastructure of transport, a prerequisite of increased population mobility inside the country, was essential for closer national coalescence.

Even a cursory review of the conditions prevailing in the individual countries of the continent reveals highly significant differences in regard to the achievement of really integrated national transport systems of a relatively advanced standard. In the five Mediterranean countries and in Namibia, Zimbabwe and the Republic of South Africa they are above the

⁵ This demand has been advocated in particular by F. Voigt: *The Importance of the Transport System for Economic Development Processes*, E/CN. 14/CAP/39, UN-ECA, Addis Abeba 1967. Cf. also Hoyle's introduction to the volume of essays edited by him and the final chapter by R. Hofmeier, op. cit.

average. Substantial new investments in transport have been made since independence in Kenya, Nigeria and the Ivory Coast in particular, and Senegal and Zambia have also greatly improved their national systems, though not to quite the same extent. In the Sudan, Zaire and most francophone countries of the Sahel zone and Equatorial Africa on the other hand conditions are still most inadequate.

The improvement of the trunk road system, mostly by bitumenization, so that it can be used throughout the year, has been crucial for the marked improvement of the national traffic situation in the mentioned countries; thus its capacity has been greatly increased. Most of the new rail extensions into previously inaccessible areas during the past two decades have, on the other hand, had rather less effect on general economic development. It is pointed out in all available studies that the extension of railway lines to West and North Uganda (Kasese, Pakwach), Western and Southern Sudan (Nyala, Wau), North-east Nigeria (Maiduguri) and North Cameroon (Ngaoundere) has not been particularly effective in improving the general quality of the respective national transport systems. The railways offer less operational flexibility than the roads and, what is more important, cover a much smaller area. The situation is, of course, quite different for railway lines built for a specific purpose, usually for moving minerals from new mines (e. g. in Liberia, Mauretania and by the Trans-Gabon Railway at present under construction). Such lines are indispensable for dealing with large tonnages of a bulk product and fulfil their purpose by enabling this to be done even if they do little else for the development of the region concerned⁶.

Cost-effective arterials – whether in the form of a railway line or a high-grade bitumen trunk road – are absolutely vital for countries and regions at some distance from the sea and seaports. Even if their natural resources offer a rich development potential, they cannot be exploited unless the unit costs per ton-kilometre on the available means of transport are low

enough. It appears that a case for new railways can only be made, if a certain minimum amount of traffic⁷ is virtually assured, for instance by a new mine or by the – already assessable – foreign trade volume of a landlocked country or geographically isolated region far from the sea. Vague hopes for general stimulatory effects of a rail link on a rural region with supposed development potential can no longer be maintained in the light of the experience gathered in this respect in various cases.

Transport Links of Landlocked Countries

There is another, primarily political side to the problem posed by tenuous transport connections for countries without direct access to the sea which are wholly dependent on transit through neighbouring countries⁸. International regulations and agreements notwithstanding, such dependence introduces an element of insecurity into the considerations of all governments of landlocked countries, the more so as governments change frequently in many African countries and the attitudes of some political leaders are apt to be erratic and unpredictable. Each of these countries has necessarily a fundamental interest in keeping or creating as many options as possible for its seaward traffic. These basic issues have an important bearing on the preservation of their national independence and freedom of action. These being ultimately political categories they cannot be gauged by purely economic criteria. Situations will arise again and again when the two different points of view will come into conflict.

The classic case in this respect was the building of a rail link between Tanzania and Zambia⁹. From the mid-sixties onwards and especially after Rhodesia's unilateral declaration of independence (UDI) in late 1965, it was to be expected that the growing political tension in Southern Africa would accentuate Zambia's isolation. This had to be treated as significant for the orientation of the country's transport facilities. Several applications by Zambia and Tanzania for provision of a rail link between the Zambian Copperbelt and Dar es Salaam were constantly turned down by the World Bank and the governments of the western industrialized states on the predominantly economic grounds that the capacity of the existing railways through Rhodesia, Mozambique and Angola was adequate and that there was no economic justification for the building of a new line. It was not denied that Zambia, with its highly developed copper industry, depended on rail transport to the sea, but the western governments and finance institutions were not willing

⁶ Concerning the effects of more recent railway lines cf. A. M. O'Connor: Recent Railway Construction in Tropical Africa, in: Transport in Africa, Proceedings of a Seminar held in the Centre of African Studies, University of Edinburgh, 1969 (reprinted in B. S. Hoyle (ed.), op. cit., p. 139-150).

⁷ At present costs this could perhaps be roughly estimated at about 0.5 mn tonnes a year.

⁸ The special problems of landlocked countries in Africa are discussed in context in the volume of essays by Z. Cervenka (ed.): Landlocked countries in Africa, Uppsala 1973.

⁹ On the background and origin of the Tanzam railway cf., especially, M. Bailey: Freedom Railway, London 1976; R. Hall, H. Peymann: The Great Uhuru Railway, London 1976.

to take the predominantly political aspect seriously into account. In the end the People's Republic of China undertook the building and financing of the Tanzam railway and did so on exceedingly favourable terms; in the light of subsequent developments this was a far-sighted decision indeed. In spite of the current operational problems the Tanzam line undoubtedly deserves on balance to be judged a success. In a generally very difficult situation it gives Zambia at the very least greatly increased flexibility in the handling of its foreign trade, and positive repercussions on the general economic development in south-western Tanzania are unmistakable, although analogous effects in the traversed part of Zambia are much less obvious. The World Bank's rejection of Zambia's application still rankles as an affront in political circles in the two countries, as a manifestation of Western opposition to the desire for a greater measure of economic and thus, of course, also of political independence. Similar though less spectacular and less fully publicized cases have occurred in other countries.

Closer Links between National Systems

The strategic importance of arterial links for general political concepts is not confined to the national sphere, in which the existence of high-grade traffic links constitutes a significant element in the internal integration of economy and society, or to the retention of the various options for safeguarding vital interests of isolated landlocked countries, but appertains likewise to supranational aspects. Their importance is perhaps *prima facie* even more evident¹⁰. At a first glance at least, major traffic routes opening whole regions and even continents seem to be especially suitable as a means of producing effective support for the closer coalescence of the many fragmented countries of the African continent. The author has examined elsewhere¹¹ the practical effects of some of these schemes and what expectations may be entertained in regard to a realization of the various trans-African transport projects.

Plans for transcontinental highways have always stirred the imagination. Men have long been dreaming of a continuous land route traversing and conjoining the whole of Africa. At first they were inspired by colonialist ideas of large colonial empires in the making. Best known is no doubt Cecil Rhodes' perception of a railway line stretching all the way from the Cape (of Good Hope) to Cairo. Plans for a modern trans-Sahara link were also formulated at an early date and have been constantly revived. In the initial phases

of the colonial era people were contemplating uninterrupted connections by rail where they are now thinking of arterial roads. The leading colonial powers, France and Great Britain, had been able to make a start on connected traffic links in at least some sub-regions of the continent, especially in Southern and Central Africa, East Africa, and the Maghreb. Plans for the whole of Africa were ruled out by colonial rivalries.

The almost complete lack of interlocking communications between African countries was brought home to them after the early sixties when the majority had gained their political independence. They had direct air links and telecommunications with the former metropolises but not with their immediate neighbours. In respect to road and rail the situation was not very different. Hence the growing desire to jettison the structures inherited from the colonial days and to work for gradual linkage of the national transport systems. The United Nations' Economic Commission for Africa (ECA) did actually a great deal more practical work in this direction than the Organization of African Unity (OAU). By commissioning studies and convening coordinating committees, it created the missing prerequisites for common action in the sphere of transport.

The efforts for closer links between the national transport systems and the envisaged arrangements for standardization of the still widely diverging legal and technical provisions may be regarded as concrete steps in the ambit of "South-South" relations and a part of the requisite efforts for the gradual achievement of a joint policy of "collective self-reliance" by the African countries¹². Very little has as yet been done to develop the relations between African countries, and this is true of virtually all spheres of economic and social life; there can be no question so far of a deliberate pursuit of "collective self-reliance". On the contrary, in some instances there has been a relapse from the attained state of cooperation, viz. the collapse of the East African Community. Nevertheless it can be said that — in spite of all the jealousy between national states and the egoistical insistence on material interests — the fundamental desire for closer

¹⁰ Particular emphasis is put on the strategic importance of arterial links by G. Arnold, R. Weiss: *Strategic Highways of Africa*, London 1977, who however neglect the economic aspects.

¹¹ Cf. R. Hofmeier: *Die Transafrikastraßen — Stand der Planung und Realisierung* (The trans-African roads — State of planning and realization), in: *Afrika Spectrum*, No. 1 (1979), p. 31-51.

¹² An introductory survey of the problems is provided by V. Matthies: *Collective Self-Reliance, Concept and Reality*, in: *INTERECONOMICS*, No. 2 (1979), p. 75-79.

cooperation and the general awareness of a common destiny are making themselves clearly felt throughout the continent. Intensification of interstate traffic connections and creation of arterial links traversing the whole of Africa are an altogether essential and indispensable prerequisite for concrete advances in this direction. Just like on the national level, where an efficient integrated transport grid has to be provided as a basic condition of an autocentric development strategy for the home market, in the continental context the systematic extension of interstate traffic links is imperative and indispensable for any pan-African policy which goes beyond mere words.

Practical Difficulties

Tremendous practical difficulties are standing in the way of a speedy achievement of such objectives. They arise mainly from the assessment of economic feasibility in the light of present conditions and the long-term nature of the hoped-for positive effects. It is almost impossible to give proper consideration to these latter aspects in the framework of a quantitative cost-benefit calculation. Plans for interstate and transcontinental transport routes naturally attract initially the interest of governments and international finance institutions (such as the African Development Bank or the EC Development Fund which, according to the Lomé Convention, is supposed to devote 10 % of its resources specifically to so-called regional projects, the majority of them connected with transport) but the actual investment decisions depend largely on the assessment of the immediate cost-benefit ratio of every single section under discussion, and in this respect the cross-border sections often show up least favourably; they usually carry very little traffic, as the main traffic flows are towards the economic centres of the individual states. A different situation arises only where the transit traffic of one or several inland countries is directed along a certain route; in this case a substantial traffic volume is often generated, creating a purely economic need for an appropriately high standard of the traffic link in question.

In the large majority of cases the situation is different. The areas in the vicinity of the border are often thinly populated. The agricultural structures are largely similar, so there are only few complementary trade exchanges across the frontiers. Those which do take place may be kept down for protectionist reasons or to prevent smuggling. When the cross-border traffic is thus kept to a minimum, purely economic criteria provide no convincing reasons for a costly extension of the transport links.

Similar considerations apply to the envisaged trans-African arterial roads. They are meant to link up as many countries, agglomeration areas and centres of advanced economic activities as possible. But to do so they must pass through vast stretches of extremely thinly populated territory little suited for economic use. No significant amount of long-distance transit traffic can be expected on the transcontinental highways even if built to a high standard, especially as far as bulk goods are concerned. For the conveyance of goods between distant termini (say between Mombasa and Lagos), transport by sea would probably in most cases still be preferred to lorry transport on land. Care must be taken not to overestimate the potential transit traffic on trans-African routes. On sections of such routes which carry little national and local traffic there seems to be no economic justification for upgrading them along their entire length.

Long-term Continental Transport Policy

The discussion of some basic problems encountered in an assessment of the trans-African arterials comes up against the same dilemmas as those posed by the national transport projects. A purely economic approach – and this is in practice the dominant one in most investment decisions – does not do justice to the long-term effects. Better interstate and transcontinental highways are a prerequisite for closer economic and political long-term cooperation between the African states, even though the volume of traffic will in the short and medium term not be abundant and may make these arterials look “unproductive”. A supranational continental grid is a long-term determinant of the economic and social structure of the entire continent. Appropriate political decisions are, therefore, needed in the interest of a balanced spatial structure in individual sub-regions and for the continent as a whole. At the same time, a warning is called for against more or less interminate investments in trans-African transport projects. A balance must be kept between the promotional outlays on infrastructure, social areas and directly productive activities, even if they cannot be quantified precisely and in detail. While the availability of adequate transport links is a necessary condition for intensified relations in all economic and social fields, the creation of a transport grid has, after all, only permissive character in the final analysis. The actual use of these arterial links will depend on a real expansion of mutual trade, gradual extension of the complementary relations between the national industrial and agricultural structures and advances in intra-African travel.