AN ASSESSMENT OF THE AVAILABLE LITERATURE ON THE NIGER ECONOMY FOR THE USAID SOCIO-INSTITUTIONAL PROFILE

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BY

JOHN H. ERIKSEN

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I. PREFACE

The assessment of the literature on the Nigerian economy which follows this brief preface is the consultant's attempt to come to grips with a large and diverse body of descriptive materials on the Republic of Niger in a very short period of time. The assessment is entirely based upon the available secondary source materials from the library of the Institute of Development Anthropology and the consultant's personal collection. As such the assessment makes no pretense of being comprehensive and it is highly probable - and unfortunate - that some reports, research documents and/or books of merit - particularly materials produced after 1979 - have been omitted from deserved attention. Most of what follows can more appropriately be labeled as the consultant's assessment of the literature - as opposed to a formal review of individual pieces - in relationship to the perceived needs of the USAID/Niger Mission for economic analysis. At best, this current effort should be viewed as a small contribution of suggestions in the Mission's continuing effort to collect, analyze and use relevant economic information for the design and implementation of an effective and consistent country development program.

II. AN OVERVIEW OF THE NIGERIAN ECONOMY

Niger has an estimated population of about 5.6 million people in 1982 and a total land area of 1.3 million square kilometers, of which 75 percent is desert, 15 percent is semi-arid and less than 10 percent is suitable for crop cultivation. About 75 percent of the total population is concentrated on less than 8 percent of the land area in a narrow strip of arable soils immediately north of the borders with Nigeria and Benin. In this area, mean annual rainfall is between 450 and 800 millimeters with great variability in both the temporal and spatial patterns of yearly precipitation. On this total arable area of approximately 100,000 square kilometers, the population density averages about 20 persons per square kilometer but the density rises to over 100 persons per square kilometer in locations favored by superior soil resources and/or ground water availability at convenient depths. The Nigerian population is essentially rural (87 %) but the urban population is increasing rapidly. The rate of urban population increase is estimated at about 7 percent per year as opposed to an increase in the rural areas of only 2.2 percent. The average population growth rate for the country is estimated at 2.8 percent per year.

In spite of being faced with a harsh climate and generally poor soil resources, which present formidable constraints to sustained agricultural development, the rural sector still remains at the center of the Nigerian economy. In 1970 the sector accounted for about 60 percent of gross domestic product (GDP) and close to 80 percent of exports. This share fell to about 44 percent of GDP and 25 percent of exports by 1979 because of the rapid rise in uranium production, export and unit prices but also because of the slow development of the rural sector itself. Recent crop production has been disappointing, particularly with regard to groundnut production which has declined - due to prevailing low groudnut prices offered to producers, disease, drought and subsequent seed stock problems - from 250,000 tons of shelled groundnuts to less than 100,000 tons. Many farmers have switched from groundnuts into grains and cowpeas (niebe) but the relative productivity of crop sub-sector continues to decline. Of the 44 percent contribution to GNP in 1979 by the total rural sector, the crop sub-sector accounted for 54 percent, livestock 36 percent, fisheries 2 percent and forestry 8 percent. The sector, however, employs about 95 percent of the labor force in Niger in crop and livestock activities. The principal crops grown are millet, sorghum, groundnuts, cowpeas and rice. Livestock production constitutes a major rural sector activity both in combination with crop enterprises and in transhumant herding activities. Livestock sub-sector production and interregional trading activities were disrupted rather severely by the drought of the early 1970s and most of the last decade, as a consequence, has been devoted to herd and flock reconstitution efforts. In recent years however, earnings from the livestock sub-sector have contributed about 18 percent of total export earnings as a result of higher prices for livestock products in neighboring countries and despite reduced volumes of traded animals. Export earnings from crop production, on the other hand, have plummeted and now constitute only about 10 percent of the total export earnings.

Before 1973, Niger was basically self-sufficient in foodstuffs in "normal" years. Over the three years of the drought (1972/1973-1974/1975), however, cereal imports averaged about 120,000 tons per year, equivalent to only about 10 percent of estimated "normal" annual production but a much higher proportion, perhaps 50 percent, of marketed production. This disquieting experience drew renewed attention to cereal production - a hitherto neglected sub-sector - and this attention by the Niger Government and the donors has been sustained despite relatively good harvests in some recent years. Although some recent projections (IBRD, 1976) have suggested that there would probably be an important millet and sorghum deficit in the mid-1980s, present indications are that, provided rainfed farming productivity projects are implemented as envisaged, Niger will continue to be roughly self-sufficient in cereals in "normal" years in this decade (IBRD, 1982). In good years, it is expected that grain surpluses will be easily marketable in northern Nigeria - unless there is an exceptional crop year throughout the entire region; in poor crop years, deficits will be met, as in the past, by imports: either purchased by government or given by donors.

Over the longer-term, however, there is reason to be concerned about the country's ability to feed itself, particularly on the basis of current production trends. While food self-sufficiency and raising of the standard of living for the rural population constitute the main objectives of the Niger Government's development policy, the effects of increasing population, leading to the disappearance of fallow lands and the increased cultivation of more northerly and marginal lands, have led to significant declines in average crop yields. This process of declining overall productivity and consequent rural impoverishment has already accelerated migration from the rural areas to the urban centers within the country and out-migration to neighboring coastal countries. This process of slow economic decline is of course much more subtle in human terms than the relatively short-term devastation caused by the occasional drought but is probably the most important and insidious problem facing Niger at this time.

The problem is made all the more pressing by the recent declines in the unit price for and the government revenues from uranium production and export which had constituted the only other major source of economic activity in the country and which had provided both a short-term financial bonanza and an important economic safety-valve for the government's program in recent years. With the rapid decline in this alternative source of domestic development funding, the Niger Government is presently faced with the difficult task of stimulating increased productivity in the rural sector in an economically viable manner and at the same time, attempting to redress the present imbalance between population demands on the limited arable land and the capability of that resource to sustain human existence at some acceptable level, given the past pattern of soil-mining and general abuse.

The main issues in the rural sector in 1982 are said to be:

1. the limited scope for further productivity increases especially in rainfed agriculture and livestock production;
2. the high costs per hectare of irrigation development;
3. the inadequacy of official input and output pricing policies in crop agriculture;
4. the growing competition for land resources between crop agriculture, livestock, and forestry activities;
5. the need to prevent further deterioration of the land resource base while, at the same time, making possible increases in productivity per unit area and per person.

(IBRD, 1982).

To date Niger Government responses to these issues have included measures to:

1. exploit the potential of existing rainfed agriculture through setting up regional productivity projects whereby improved extension, input supply, credit and marketing services would be made available to farmers;
2. develop in an economically efficient manner the irrigation potential of the country as a complement to rainfed agriculture;
3. make improvements in output prices by moving them closer to economic border prices and reduce subsidies where politically feasible;
4. encourage the rural population to take appropriate conservation measures such as the planting of trees for windbreaks and shelter belts and, in some cases, reserving areas for pastures, and;
5. improve the quality of services provided by the rural development institutions through education and increases in their staffs and working capital.

A summary statement on the Niger economy, then, might read as follows:

> Niger is a large country geographically with a very small economy in macro-economic terms. The economy is overwhelmingly agricultural in nature with few economic alternatives to a subsistence-type rural sector which must serve as the principal source of employment for the active work force and the engine of growth and development. The only other significant economic activity in the country - not linked directly or indirectly to the rural sector - is uranium mining and export of uranium concentrates to the EEC - principally France. The uranium ore deposits in the country constitute a significant resource for the future but development of this resource is likely to be slower than predicted in the mid-1970s due to the present decline in uranium concentrate unit prices. For the foreseeable

future, any Nigerian development which is to directly affect large numbers of citizens will almost certainly have to come from progress in the rural sector, chiefly from improved crop production and better offtakes from livestock raising activities.

III. MACROECONOMIC INFORMATION AND TRENDS

The Niger Government officially produces no macro-economic information on its economy. All officially economic series related to national accounts, external trade figures, and the normally reported monetary statistics were apparently suspended in 1969 (IBRD, 1976) and, to the consultant's knowledge, have not been renewed. This, of course, does not mean that there are no statistics on macro-economic trends in Niger but simply that such statistics are apparently considered unofficial estimates generated primarily by external agencies and, as such, are not acknowledged as accurate by the Niger Government. Unfortunately, this system - which is believed unique in Africa - often means that such time and cross-sectional data series as are maintained by external agencies are closely held documents and are not generally made available to the public, even in Niger.

The principal sources of macro-economic information within the Niger Government are the Ministry of Finance, the Ministry of Plan, and the Ministry of Economic Affairs, Commerce and Industry. Outside of the country but in contact with the above Ministries, the principal agencies collecting and analyzing macro-economic information are the International Monetary Fund (IMF), the International Bank For Reconstruction and Development (IBRD), and the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). In addition, extensive records of Nigerian economic transactions are kept by the French Government as the principal economic backer of the countries in the CFA Franc zone and the chief administrator of the monetary arrangement with the French Treasury.

Of the literature that is available to the consultant, the two principal sources of macro-economic information on Niger are the AID contract report on macro-economic trends in Niger (Horenstein, 1979) and the IBRD Economic Memorandum on Niger (IBRD, 1976). Both are good sources of information on the Nigerian economy for the periods they cover - i.e. 1969 - 1978 and 1970 - 1976, respectively - but they are, unfortunately, rather badly outdated at present. Furthermore, both documents are essentially compilations of macro-economic information from the various sources already mentioned - e.g. the Ministries, the IMF and the BCEAO. Although they do an entirely adequate job of presenting what is available, neither report can be entirely sure of the veracity of the data presented.

About all that can be truthfully said with regard to the data presented in these reports - or in others of similar ilk - is that the accuracy of the statistics is probably inversely correlated with the number of points at which the data must be collected for a particular statistic. For example, the external trade statistics maintained on the Nigerian uranium industry are probably quite accurate since the production and marketing channels are highly restricted and the flows of both inputs and outputs are monitored by several private sector and governmental agencies in both Niger and France. By contrast, trade statistics on livestock sales to Nigeria or on the actual percentage of any annual grain crop that is commercialized either in Niger or externally - apart from direct marketing through government marketing agencies - are at best categorized as guesses. This is so because in most cases of private external sales of agricultural or livestock products, the objective of the seller is to avoid both restrictive government price and tax policies and the agents charged with enforcement of those policies. This type of open border and sales activity through surreptitious agents obviously does not make for accurate government trade statistics.

The central problem with macro-economic data for Niger of course is that there is essentially no alternative to the reams of figures and statistics released officially or unofficially by the Niger Government and the external agencies mentioned above.

If one is compelled to use macro-economic data for purposes of AID program and project planning, then basically one must accept as given the existing time series and cross-sectional data available from the Niger Government and the external agencies. Unlike the situation posed by micro-economic data problems, where gaps can be effectively dealt with in the context of project design and implementation, most macro-economic data series are only of use if maintained with a high degree of accuracy and uniform methodologies over a considerable period of time. Even moderately sophisticated econometric analyses would normally require data series with twenty or more entries - i.e. twenty years in the case of an annual series - to be anything more than descriptive in nature. Had the Niger Government maintained such series since Independence, the macro-economic researcher in 1982 might have had the data necessary to begin serious research on the economy. Under the present situation, it would be better to view most macro-economic statistics from Niger as approximations of reality at best and accept them with a considerable amount of salt.

If the Mission feels the necessity to maintain macro-economic data series derived from the available information, the simplest and least costly method of going about this is to arrange an exchange of information with the IMF and a competent macro-economist consultant on a regular basis. The IMF produces a bi-annual report on the Niger economy and a series of supplementary reports on analysis of selected topics connected with the Niger Government's dealings with the Fund. Given these basic documents and others - e.g. the BCEAO's series entitled Notes d'Information et Statistiques - a macro-economist consultant could extract the information desired for Mission use and update all data series in a relatively short period of time each year. Since this has apparently not been done for the Nigerian economy since the Horenstein report in 1979, it would seem appropriate to conduct such an exercise in early 1983.

In recommending the compilation and analysis of the existing macro-economic data on the Nigerian economy, the consultant should stress that the purpose of this exercise would be purely descriptive. Given the limited scope of the data collected, the unevenness in its quality, and the apparently ambivalent attitude of the government toward the whole process of data collection and analysis, it would be rather dangerous to utilize the existing information as the basis for predicting much about the future state of the Nigerian economy. The present rapid turnaround in the uranium situation should be ample education for those who would devote much time to such predictions.

IV. GOVERNMENT AND THE ECONOMY

As one reviews the information available on the Nigerian economy, as reflected in the attached reference list, one is struck by the relative paucity of concise information on exactly how the Niger Government functions as the principal actor in economic affairs in general and the rural sector in particular. It is obvious that the government plays a dominant role and intervenes in all sectors of the economy but there is little by the way analysis of its specific actions and their consequences. For example, there appears to be no comprehensive analysis post 1979 in terms of attainment of the objectives of the Government's Five Year Development Plan 1979 - 1983 or the ex poste legitimacy of the rationale of the entire Plan. If the Mission is to be required to enter into constructive and continuous policy dialogues with the Niger Government on a broad spectrum of issues relevant to rural sector activities, then it would seem to be essential to have a comprehensive analysis of the current state of the government's strategic economic planning, the specific objectives it wishes to achieve, the reasons behind the articulated policies, and the relationships between stated economic objectives and the availability of means to achieve them.

At this point in time, the Niger Government should be in the process of formulating its next development plan for the period 1984 to 1988. It would be logical to assume that critical decisions on the direction of the Nigerian economy will be made over the next year or so which are bound to impact on the present and planned USAID programs through the end of this decade and beyond. USAID should, therefore, position itself to be an active and informed participant in such policy discussions and decisions. An initial step in this direction should be a comprehensive review of the economic results of the current Development Plan period. The stress here should be on three specific questions:

1. Does the present Niger Government strategy for food self-sufficiency and economic self-reliance still make sense in overall terms as a potential centerpiece for the next development plan, based on past events and the implementation under the present Plan?
2. What elements of the economy's performance record under the present Plan can be attributed to specific government initiatives and what was attributable to exogenous factors unrelated to planned development?
3. What was not successful during the present Plan period and what were the constraints to better performance?

Based on the documents available to the consultant, the opinion must be posited that the Mission might be in a rather difficult position at present if forced to enter into a serious policy dialogue with the Niger Government <u>and</u> immediately articulate well-defined and consistent Mission positions on critical issues like agricultural pricing policies for outputs and subsidies for inputs, the appropriate future role for Nigerian parastatal organizations versus private sector agencies in servicing the rural sector needs; or the appropriate balance to be struck between food grains and cash crop production given Niger's economy and geographic situation. If a policy dialogue is to be instituted at any level higher than project design and implementation issues, it must be proceeded by a determined effort to collect and analyze the requisite information needed to arrive at independent Mission judgements on pertinent economic policy issues. In some cases - e.g. the agricultural pricing and subsidy issues - considerable analytic assistance may be forthcoming from studies underway - like the FAO/African Development Bank/Caisse Centrale study - but the Mission must still bear major responsibility for doing an independent analysis of the assumptions and results of the work performed, especially since the consultants performing such analyses often come from governments and economies closely akin to that of Niger and may not have the most objective views on the alternatives to the present pattern of massive state interventionism in economic affairs in general and the rural sector in particular.

A second point which should be mentioned in the context of the economic dialogue envisaged is the perceived need for the Mission to have a resident capacity in the required economic analysis. One is impressed in reviewing the available documents that virtually every economic analysis on Niger was performed on a short-term contractual basis by an outside consultant, group of unrelated consultants, or an institution. If one views economic analysis and policy dialogue as the installation of a continuous process between the Mission and the Niger Government, it would seem highly unlikely that the Mission would be well served by a continuation of such creative ad hocery. With the exception of consultancies designed simply to do a quick update and simple analysis of available macro-economic data, any serious policy dialogue would seem to require a resident capacity in the Mission unrelated to any specific project and unencumbered by the usual tasks given to the Mission program economist. This resident capacity could be a single economist - although a macro-economic planning economist and an agricultural economist specialized in policy analysis would be preferrable - who would serve as the focal point and originator of all economic analyses for USAID/Niger. The work might be done in collaboration with short-term consulting economists and long-term project-related economic researchers but the resident economist would provide the Mission Director for the needed continuous flow of economic analysis and respond to his requests for information.

The reasons for the separation of this economic analyst(s) from normal project activities are well illustrated by the recent project paper submissions by the Mission - e.g. the Niger Agricultural Production Support Project. The documents generally do a good job of identifying major issues in the rural sector which are likely to seriously constrain project development - e.g. the availability of an improved technology or technologies for rainfed agriculture, Niger Government policies on agricultural output prices and input subsidies, the manpower constraint, and the recurrent cost issue - but the analysis of these issues is rather sparse and is conducted only within the narrow limits of the project design effort. The prevailing issues, however, are universal in the rural sector and almost certainly cannot be effectively analyzed - much less ameliorated - in the context of a single project activity. It would seem to be much more logical and effective for Mission operations to have a resident capacity charged with the responsibility for analysis of these larger issues and arriving at consistent Mission positions on the most pressing economic items. Such a resident capacity would greatly facilitate the short-term tasks of journeyman economists charged with project-specific economic analyses but, much more importantly, would provide the Mission Director with an adequate basis for entering into serious policy discussions with Niger Government officials and other donor agencies.

It would seem that the Mission could also lend assistance to the Niger Government planning apparatus in the following ways:

1. Instilling an idea of economic analysis and planning as an on-going process and not simply a massive effort that one mounts each time a new development plan is called for each five years;
2. Instilling an idea that the development planning process is not a static point in time exercise but requires a well thought out mechanism for plan revisions and adjustments over time;
3. Instilling an idea that methods must be developed in Niger's case for programming windfall uranium revenues

into high priority development activities outside the five year plan exercise;

4. Instilling an idea that planning requires a constant review of the underlying plan strategy, in light of current events, to determine continued validity and examine alternative courses of action.

With regard to the first point, the interviews conducted by the consultant in AID/Washington with previous Mission personnel confirms his suspicions about the nature of the planning process in Niger. The prevailing comment with regard to the current Five Year Plan was that it took too long to produce and essentially paralyzed the upper echelons of the government for months on end. This apparently was the result of the prevailing Nigerian view that the Plan document itself is the objective of the planning process. The impression is that officials work very long hour and with reasonable competence on the Plan and then forget the planning process once the Plan has been finalized and printed. This attitude would seem to be amenable to change and USAID/Niger could profitably assist the government in this regard.

Secondly, the impression prevails that, since the Plan is viewed as a static document and virtually a political credo, the Niger Government did react very well to the unanticipated drop in uranium revenues and did not have any well-thought-out mechanism for modifying elements of the Plan when it became clear that they were inoperative for lack of anticipated revenues. Again, the Mission by helping to instill the notion that it is the planning process - and not the Plan document itself - which is of utmost importance could render a valuable service.

Thirdly, it would appear to be the case that uranium revenues, while a long-term blessing for a resource-poor country- cannot be programmed effectively into a development plan at anywhere near the optimistic levels anticipated in the present Plan. It would appear to be much more sensible to instill the idea of programming uranium revenues into development plans at extremely conservative levels and then setting up a separate procedure for evaluating and funding supplementary development activities on the basis of actual availabilities of "windfall" uranium revenues.

Finally, there is definitely the question in the present situation of the fundamental wisdom of a government strategy which apparently opts for food grain production at almost any cost and neglects the opportunity costs involved in foregoing potential receipts from increased cash crop and livestock production. This strategy is particularly questionable in view of the decline in uranium receipts and the fact that most grain exporting countries are awash in cheap food grain stocks at present. Given the possibility that food grain production at the margin could be replaced by higher value cash crops for export and that export earnings could then be used to buy in cheap food grains for domestic consumption, the food self-sufficiency strategy should be seriously reviewed in the coming months. Additionally, Niger government officials seem to have created an unnecessarily complicated set of border restrictions on livestock exports to meet the exigencies of a drought recovery situation and then forgotten to remove these restrictions when the reconstitution process succeeded. This situation has apparently caused significant losses in export revenues both to Nigerian herding groups and to the government (Makinen, 1982) and should be reviewed in policy dialogues with the government.

V. MICRO-ECONOMIC RESEARCH AND ANALYSIS

With regard to micro-economic research on the rural sector in Niger, anyone with a long-standing acquaintance with the country cannot help but be impressed with the quantum jump in the availability of high-quality studies and, particularly, with the output from U.S.-trained researchers. Over the period since 1970, significant micro-level studies have been completed by Horowitz (1972 and 1975), Baier (1974 and 1976), Eddy (1979), Collion (1981), Makinen and Ariza-Nino (1982), McCullough and Arnould (1979), Thomas-Peterhans (1982), Wardle (1977 and 1979), Sutter (1980 and 1982), Charlick (1974 and 1977) and Faulkingham (1977). In addition, distinguished studies have been produced by non-U.S. trained researchers of which the long-term work of Bernus (1974, 1977 and 1981) and Raynaut (1980) stand out. Finally, there are a number of studies in process which should appear in the literature over the next few years. These studies include work by White, Swift, Maliki, Fitzgerald, Thomas-Peterhans, Loutan, and Curry.

It is obvious that comprehensive reviews of all these research papers are beyond the scope of this paper, given the total time allocated and the diversity of the topics covered. What can be said with some assurance is that an excellent start has been made at the micro-level in providing the Mission with relevant information for the envisaged policy dialogue and for the design and implementation of the various projects in the Mission program. Furthermore, there seems to be a trend toward tieing the micro-level research studies more closely to the Mission's on-going projects. The recent work in the context of the Niger Range and Livestock Project is the outstanding example of this gratifying progress.

For the immediate future, the consultant's recommendation would be that the Mission institute a process of integrating the information contained in these diverse studies into a series of Mission policy papers on the following key development issues:

1. The optimal use of Nigerian land resources in the interface zone between the southern cropping area and the northern pastoral zone;
2. The optimal balance between development activities directed at food self-sufficiency and those directed with expansion of export opportunities for cash crop and livestock products;
3. The micro-economic effects of government output pricing and subsidization of inputs on farm resource allocations in the cropping zone;
4. The constraints to improved performance of governmental agricultural agencies and parastatals in development of the rural sector;
5. And, the optimal role of the private sector in rural sector development.

It is believed that the production by the Mission of a series of policy papers is preferable to an updating of the 1979 agricultural sector paper because:

1. The utility of more focussed presentations on issues relevant to the Niger Government's own planning process for the new development plan is judged to be greater than another general sector review;
2. The presentation of the essential findings from the afore-mentioned body of micro-level studies in an organized and policy-relevant context is likely to stimulate government officials to give more attention to these source materials in their planning efforts;
3. The internal Mission exercise of extracting and integrating policy-relevant information from these documents is the best possible way of instilling an appreciation of the strengthes and weaknesses of the previous research efforts that have been sponsored by USAID contracts and giving Mission personnel a sense of direction for future sponsored research efforts.

For the longer term, it is believed that the Mission should assess three major items in deciding on the allocation of research funding:

1. The alleged bias in the geographic location of research previously sponsored;
2. The balance between studies oriented toward livestock production and marketing and those oriented toward farm-level cropping activities;
3. The prospects for tieing future research efforts more directly to the production of policy-relevant results in areas of Mission program emphasis.

With regard to the first issue, the allegation is made in the 1979 Agricultural Sector Analysis (Enger, 1979) that research efforts in the past had been heavily biased toward the Zinder and Maradi Departments. This criticism is difficult for the consultant to evaluate fully but there seems to be some justification in this contention if one eliminates those available studies that are oriented basically toward the pastoral zone. For example, there is no indication among the available documents that significant farm-level research has been produced and disseminated from the Niger Department, which is the current focus of the Mission's agricultural activities, whereas there are numerous studies from the eastern part of the country.

There is a perceived bias in the available studies and those known to be in process toward greater concentration on livestock production and marketing. This is probably more a function of the more advanced state of implementation of the Niger Range and Livestock Project in the Mission's program than any deliberate strategy in research allocation but a review of this bias might be in order for the future. This is particularly the case since the livestock industry seems to be making a rather successful recovery from the drought years whereas the agricultural sector seems to be in a prolonged decline.

Finally, when viewed from the perspective of the integrated economic analysis and policy dialogue orientation present in this paper, it would seem logical for the Mission to attempt to tighten the adminstration of any future research program so as to provide more direct inputs into the larger Mission program. This tightening would seem to be particularly relevant to those research funds which are made available outside the context of individual projects.

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