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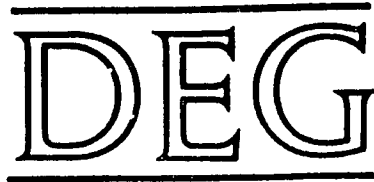
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**FINAL EVALUATION
AGRICULTURE SECTOR
DEVELOPMENT GRANT
(USAID Proj. No. 683-0246/47)**

MARCH 1989

Development Economics Group of Louis Berger International, Inc.

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March 17, 1989

Roger Bloom
ASDG Project Officer
Agriculture Development Office
USAID-Niamey
NIGER

Dear Roger:

I am pleased to forward the Final Evaluation Report on the Agriculture Sector Development Grant Program. I am enclosing twenty reports in English and forty reports in French as required by the delivery order.

We enjoyed working with you and I hope that we get a chance to work together again.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Qaiser M. Khan', written in a cursive style.

Qaiser M. Khan
Chief of Party,
ASDG Final Evaluation Team

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Executive Summary

1. Introduction

1.1 The Agriculture Sector Development Grant (ASDG) program was a very timely and necessary intervention. It was conceptually well designed, and, as long as the projects funded through the counterpart fund were of the same average impact as other USAID projects, the ASDG program was superior to those projects as it brought with it the externalities of a substantial and necessary policy reform program.

1.2 The recommendations made during the mid-term evaluation were followed with minor exceptions.

2. The Policy Reform Experience

2.1 Introduction

Most of the policy reforms required in the ASDG agreement and the project log-frame were carried out. The Government of Niger (GON) displayed great sincerity in the matter.

2.2 The Cooperative Movement

The greatest constraint to the implementation of the reforms is weakness of the cooperative movement in Niger. The movement is overly centralized and imposed from above. There is some confusion in GON circles between official efforts to mobilize the rural population and a genuine cooperative movement. The former, while being a legitimate option for the government to follow, is not a true cooperative movement. Therefore, to institutionalize the reforms there is a need to develop a strong independent cooperative movement which can play the part envisaged in the original ASDG program. Otherwise the reforms will suffer in the long run since a genuine cooperative movement lies at the heart of their success, particularly in the areas of input distribution and grain marketing. At present a reformed charter for the cooperative movement is being prepared, which may address some of the concerns expressed above.

2.3 Reforms in the Agriculture Inputs Market

2.3.1 The GON has moved to remove subsidies on agriculture inputs. Using the landed price of Nigerian fertilizer as a reference, the overall level of subsidy reduction at the Centrale d'Approvisionnement (CA) has kept well ahead of the targets identified in the ASDG program grant agreement and log-frame.

2.3.2 The government has undertaken its commitment to restructure the agriculture inputs market by moving to remove the CA's monopoly and transferring the CA to the Union Nationale des

Cooperatives (UNC). The success of this move depends on the UNC-led cooperative system becoming a genuine cooperative movement, which it is not at present.

2.3.3 The liberalization of the agriculture inputs market and the reduction of subsidies at the CA has increased the private sector share of the agriculture inputs market. During a period when the demand for fertilizer was growing due to better rainfall, CA sales of fertilizer dropped, indicating that the private sector was capturing a larger and larger share of the agriculture inputs market.

2.4 Reforms in the Grain Market

2.4.1 The Office des Produits Vivriers du Niger (OPVN) has given up its price stabilization role and has lost its monopoly of the grain trade under the terms of the ASDG agreement. The OPVN's role has been reduced to managing the emergency food reserve and handling foreign food aid.

2.4.2 Under the terms of the ASDG agreement and the World Bank Structural Adjustment Credit (SAL), OPVN has proceeded to implement a Tender and Bid System (T&B system) for its grain purchases. The first attempts were not very successful and the OPVN ended up paying higher than market prices to merchants who had earlier bought from the farmers. But, the most recent tender (January 1989) was organized by the World Bank with the help of a team experienced in such operations. This time, the T&B system achieved its objective of buying at the lowest prices prevalent in the respective markets.

2.4.3 The only failure in the operation of the T&B system was that the cooperative movement did not secure a larger share of the market. The element that hurt many cooperatives was that their legal status made it impossible for them to obtain the bank guarantees necessary to make the bids. They were required to seek special exemption from the bidding requirements.

2.4.4 The development of the Village Grain Banks has proceeded, and the target of 6,000 tons in the log-frame and grant agreement seems to have been reached well ahead of schedule.

2.4.5 Uniform National Pricing for cereals has been abandoned. The government still tries to support prices of cotton and rice, are financially supported in this by some donors.

2.4.6 A key element in the log-frame and the grant agreement has yet to be achieved: the broadcasting of information on prices of key agriculture products in 75% of the arrondissements by the end

of the ASDG program.¹ The importance of this for the efficient functioning of agriculture markets cannot be over-emphasized. At present, this information is available only to large scale traders, enabling them to take advantage of variation in prices to maximize their profits. Farmers, small-scale traders and cooperatives would have access to the same information if it were broadcast widely. More competition in the markets would result. Consumers would benefit as well as farmers, small-scale traders and cooperatives. The required information is already being collected by the Ministry of Agriculture but is distributed in the limited circle of government departments and donors. Steps need to be taken to ensure that the information is available to all Nigeriens. USAID-Niamey has included a benefit/cost study of the issue in its Action Plan.

2.5 Border Trade with Nigeria

2.5.1 Border trade with Nigeria has expanded sharply in recent years. Both exports and imports have gone up, though imports have probably increased faster than exports. Nevertheless, producers and consumers in Niger have both benefited, the latter through lower prices and the former through expanded market opportunities.

2.5.2 Exports to Nigeria (primarily cowpeas and livestock) are determined by two factors. The first is production in Niger and the second is the demand for Nigerian products. Surplus production in Niger has no real market other than Nigeria. As production increases, as it has done since 1984-85, exports to Nigeria increase. At the same time, paradoxically, the falling value of the Naira has actually encouraged exports, due to the increased demand for Nigerian products and the need to pay for them in Naira.

2.5.3 ASDG policy reforms contributed to the expansion of border trade in several ways. First, restrictions on cowpea exports were removed. Second, livestock export procedures were formalized. Third, and most important, the government did not move to restrict the flow of Nigerian imports as would have been done in most countries faced with a sharp rise in imports from a neighboring country.

2.6 Rural Credit

2.6.1 The rural credit study proposed under the grant agreement was conducted by Ohio State University. The study found a number

¹ It was not, however, a condition precedent in the agreement.

of problems at the Caisse National des Credits Agricole (CNCA), most of which were beyond the control of its management. At the same time, the study found a great pool of informal sector savings in the rural areas of Niger. Based on these findings, the study recommended that the CNCA be abolished and steps taken to set up a credit union movement in the country to formalize the large pool of informal sector savings.

2.6.2 The GON has abolished the CNCA and has agreed in principle to setting up a credit union system in Niger. At the same time, while a formal charter for a credit union movement is being developed, the GON has created an interim legal status for the development of pilot credit unions.

2.7 The Impact of Policy Reform

2.7.1 Reforms at the OPVN and the CA are expected to contribute to notional savings of over 7 billion Francs CFA during the ASDG program period (1984-89). Furthermore, unless the reforms are reversed, these savings will become permanent at approximately 3 billion Francs CFA per fiscal year. The revenue effect of the policy reform is yet to emerge clearly. As output grows due to increased economic efficiency, there should be an increase in general revenues. The reduction of restrictions on border trade of cowpeas and livestock is expected to increase the flow of this trade through legal channels, which will generate revenues even though rates will be lower.

2.7.2 More importantly, in the long run, the policies should contribute to increasing the efficiency of use of investment resources, thereby decreasing (i.e. improving) the Incremental Capital Output Ratio (ICOR). This however is a long term effect. It is too early to estimate it.

2.7.3 The policy reforms have contributed to an expansion in both imports and exports, though the former have probably increased faster. The availability of cheaper Nigerian goods has helped reduce the African Price Index, i.e. inflation has been negative.

2.7.4 The equity effect of the policy reforms is less clear due to the lack of a household income and consumption survey after 1962. The removal of subsidies on agriculture inputs was not necessarily inequitable. A study of farm budgets indicates that the bulk of millet, sorghum and cowpea farmers spend less than one percent of their cash outlay on fertilizers, fungicides and pesticides.² These are the poorest group of farmers in Niger,

² Swinton, Scott M. Cropping Systems Budget for South Central Niger in 1984 and 1985, Department of Agriculture Economics, University of Minnesota, St. Paul, MN, U.S.A.,

they did not benefit from the input subsidies. The beneficiaries were the wealthier farmers in irrigated areas. In so far as across the board input subsidies can be considered a transfer from the Nigerien population at large to a wealthier than average group of farmers, then the removal of the subsidies actually helped improve income distribution.³

3. General Macroeconomic Impact of Resource Transfer

3.1 Impact of ASDG on Gross Domestic Product (GDP)

3.1.1 ASDG transfer of funds: Immediate expenditures effects: GDP increased by Francs CFA 9.5 billion, over the 1985-88 period. Productive effects: GDP increased by an amount in the range of Francs CFA 1.2 billion to Francs CFA 3.8 billion. The lag structure is not known, thus the year by year effect cannot be shown. The actual impact in the short run is likely to be closer to the lower figure (1.2 billion Francs CFA), though in the long run it should increase as the ICOR improves due to the policy reforms.

3.1.2 ASDG Policy Reforms: Long-run effects: At this stage, it is not possible to assess the long-run GDP effects of the ASDG policy reform-induced changes in the agricultural sector. Short-run effects would occur if the budget savings at CA and OPVN were invested. In that case the short run impact could be in the range from 600 million Francs CFA to 2.0 billion Francs CFA. There is however no indication that these resources were actually invested.

3.2 Impact on the Budget

3.2.1 ASDG Transfer of funds: Increase in budgetary revenues, by about Francs CFA 0.9 - 1 billion.

3.2.2 ASDG Policy Reform: Input subsidy cut by the CA saved over 1 billion Francs CFA during fiscal year 1986-87. Savings are expected to increase in future fiscal years. As a result of the re-organization of OPVN, another 1 billion Francs CFA was "saved" during fiscal year 1986-87. These notional savings are expected to be as high 3 billion Francs CFA per fiscal year. The long-run effects of ASDG policy reform cannot be quantified.

3.3 Impact on the Balance of Payments

3.3.1 ASDG transfer of funds: Imports increase by Francs CFA 11 billion through "expenditures" effects. The productive effects on imports are marginal (Francs CFA 0.2 - 0.8 billion).

January, 1988.

³ Subject to how the money saved from subsidies is used.

absence of clear and obligatory procedures makes it difficult to obtain necessary information on the proposed projects.

4.2.3 The support provided by the Technical Assistance team to the Secretariat is minimal, partly because of the other tasks assigned to the team and because the team seems to have had difficulty defining a work plan.⁴

4.3 Efficiency of Operations

4.3.1 Disbursement rate was satisfactory once the CPs were met. The disbursement rate was close to 96%.

4.3.2 The lack of financial information on projects is unacceptable as it blocks effective monitoring and evaluation of operations. The TA team should make it a priority to help set up a financial data bank for the projects funded by the CF.

4.3.3 The data indicates that the CF funded about 75% of recurrent costs. This is a natural consequence of a program which included in its objectives financing of GON contributions to donor supported projects. These contributions tend to be recurrent costs. Furthermore, in its early years, ASDG funds went to finance recurrent costs of two major USAID projects, Niamey Department Development and the National Cereals Program. This was done at the request of USAID. Finally, it must be noted that in the case of small scale industry and service businesses, such as the Artisan Training Project, it is difficult to identify what are recurrent costs and what are capital costs.

4.3.4 There is less link between the ASDG reform package and the projects financed than may be desirable. On the other hand, studies and training are hardly ever funded even though they could provide an important link between the financial operations of the CF and the policy objectives of ASDG.

4.3.5 Two projects examined in detail indicate that while they correspond more or less to the goals set out in ASDG there is no clear definition of how these objectives are to be attained. The CF should fund studies specifically to develop procedures to attain these objectives.

4.4 Financial Monitoring of Projects

There is limited financial monitoring, making it impossible to exercise effective budgetary control. The Secretariat's material and human resources are limited but it is possible to make a

⁴ Particularly so at the Ministry of Planning. It must be noted that assistance to the Secretariat was not in the original terms of reference and only included in a latter amendment.

start on a selected group of projects. Expansion to financial monitoring of all projects can be done through sub-contracting.

4.5 Relationship with National Investment Budget

The Counterpart Fund served to increase the investment budget during 1985-88 by the amount disbursed. The ASDG funds appear in the Investment Budget as a special facility. As long as this continues, there is little incentive to analyze projects for CF funding more rationally.

4.6 Conclusions and Recommendations

4.6.1 Two types of problems have emerged in the management of the Counterpart Fund. The first group includes problems related to the selection of projects for funding, such as lack of necessary economic and technical analysis and conformity with the ASDG policy reform package. The second type of problems concern the technical and financial monitoring of the projects. Without such monitoring, project quality cannot be assured.

4.6.2 The Secretariat has become more an instrument for funding projects and programs outside the investment budget than an agency to implement the whole ASDG program. These problems were identified by the mid-term evaluation but they continue to persist.

4.6.3 The Evaluation Team recommends setting up stricter procedures and better utilization of existing resources:

- Secretariat Personnel should attend workshops and seminars on agriculture policy;
- a standard format for presentation of funding requests should be established;
- insist that requests should follow strict technical and economic procedures and refuse requests that do not meet set standards and format;
- create a central data bank for updated financial and technical information from projects and programs funded by the CF;
- define precisely the statutory position of the Secretariat in order to give it powers to facilitate the monitoring and evaluation of projects/programs financed or proposed for financing by the CF;
- introduce a management and budgetary control system over at least a selected number of projects.

5. The Technical Assistance Component

5.1 Objectives of the Terms of Reference

5.1.1 The TA component was designed to re-enforce GON capabilities to direct and monitor the ASDG program. It was also expected to help implement and monitor the effects of the policy reforms. It helped set up in DEPSA⁵ a special section called SAPA⁶ devoted to analyzing and monitoring agriculture policy. The TA component included five experts: one at the Ministry of Planning,⁷ three at DEPSA and one at the National Seed Development Program. The last person was charged with seed policy.

5.1.2 The TA program as conceived was well adapted to the needs of ASDG which for USAID was a pilot program. There was a need to monitor the program as well as to assist in implementation. The team was to develop the analytic capacity in GON to define and implement the reforms. It was necessary to collect and circulate information at the highest levels of USAID and GON, to implement ASDG, to train Nigerien staff, and to develop self-contained capacity at GON. The Terms of Reference required the experts to possess strong analytic, design, conceptual and interpersonal skills.

5.2 Achievements of the Technical Assistance

5.2.1 The TA achieved several objectives:

- At SAPA/DEPSA, they put in place a system to collect and publish statistics with minimal delays. They also trained DEPSA personnel in use of computers and produced studies on several aspects of the policy reforms.
- At the Ministry of Planning, the TA participated in the development of appropriate procedures for monitoring and selecting projects financed by the CF.
- At the National Seed Program, the TA helped prepare a Seed Development Program.

⁵ Direction des Etudes, de la Programmation et des Statistiques Agricole (Directorate for Planning, Studies and Agriculture Statistics).

⁶ Section d'Analyse des Politiques Agricoles or agriculture policy analysis section.

⁷ Responsible for helping to analyze projects present to the CF for funding.

5.2.2 The TA team failed to achieve several objectives defined in their Terms of Reference:

- At SAPA/DEPSA, they failed to recommend specific policies. In their studies, they failed to identify projects or programs suitable for funding by the CF. Their studies did not identify key economic indicators to monitor the progress of reforms, nor did they help to develop a system at the CF Secretariat to monitor financial and technical aspects of projects. They did little to systematize an information flow system.
- At the Ministry of Planning little time was devoted to ASDG work due to constant demands from the Ministry to take up what were considered more pressing matters.⁸ After a four year presence, there is as yet no help given to USAID to monitor the economic impact of the reforms, although the TA team did follow and detail events affecting the reforms.

5.3 Recommendations

5.3.1 The Evaluation Team recommends that much more attention be paid to the Terms of Reference so that the difficulties noted above can be resolved.

5.3.2 The experts should be supervised either by a Macroeconomist or by an Institutional Specialist. The Chief of Party and the Agriculture Policy Analyst are doing basically the same technical work. The data collection tasks have reached a point where it would be useful to replace one of the TA experts with an economist familiar with macro-economics. This person should focus on institutional development as well as organize information flows between the Secretariat, the Management Committee and the Technical Committee. Eventually, this person should become the Chief of Party.

5.3.3 The data collected by the team should conform to a global plan. The TA team did collect much useful information, but a lot of time was spent collecting data available elsewhere which was not related specifically to the overriding need to assess the impact of ASDG. Time could be devoted to gathering basic indicators which would be more useful in monitoring the impacts of ASDG.

5.3.4 Any future TA effort must designate a person who is responsible for training and institutional development. Also,

⁸ A framework was devised by the adviser to help the Secretariat prepare projects, but this has not yet been put into operation.

included should be an environmental specialist (short- or long-term). The systems analyst position can become short-term as the basic work has been completed.

6. Towards an ASDG II

6.1 Introduction

ASDG I has been a successful program even though it has had some problems. These problems provide insights that will allow a future program to be even more successful. The Evaluation Team strongly recommends that a similar program be undertaken (for want of a better name : ASDG II).

6.2 Policy Reforms for ASDG II

6.2.1 ASDG II should try to consolidate the policy reforms made during ASDG I by training GON staff in the benefits to their country from the reforms. Only if they perceive these benefits will they support the reforms.

6.2.2 ASDG II should consolidate the pilot moves made towards the development of credit unions. A final legal charter should be drawn up for the credit union system and the number of unions expanded.

6.2.3 ASDG II must focus on reform of the cooperative movement in the country. The legal charter must be modified to allow for independent cooperatives as in Senegal. Individual cooperatives or Groupement Mutualistes Villageois (GMVs) must also be allowed to function as independent business entities. The proposed code revisions may allow this to happen.

6.2.4 ASDG II has to push for the broadcasting agriculture prices all over the country. It is a very important element in the efficient functioning of markets and should primarily help farmers, small-scale traders and consumers. The larger scale traders already have access to this information.

6.2.5 It is ironic that the best agriculture lands in the country, i.e. the irrigated areas, are being devoted to producing subsidized crops (rice and cotton). The very area which may be suitable for growing a diverse variety of crops is tied up with growing economically inefficient crops.⁹

⁹ It was noted that the irrigated perimeters are only suitable for rice and cotton, and that the cost implications of switching to other crops are high. The validity of this assertion is difficult to verify until the distorting subsidies have been removed. Furthermore, sunk costs provide no justification in economic analysis for continuing a drain on the budget through subsidies.

6.2.6 A crucial need in the fragile environment of the Sahel is natural resource conservation. Policy reforms must be pursued in this area. Projects funded under ASDG II should be scrutinized for their environmental impact. Some policy reforms required to conserve natural resources, such as limiting grazing in marginal areas, are likely to have negative consequences for the poorest segments of the population. These groups could be compensated by projects directed specifically to their needs.

6.3 Institutional Aspects of ASDG II

6.3.1 The Counterpart Fund can play a very important role in ASDG II provided that it is managed better. The history of ASDG I indicates that the Counterpart Fund can effectively mobilize resources quickly. The other option is a simple transfer of funds, but that provides no guarantee that funds will go to investment. The benefits to GDP from investment are a major component of the benefits of ASDG.

6.3.2 The Counterpart Fund Secretariat has to be consolidated and given much more effective power in day-to-day operations. The Management Committee should continue to coordinate the investments made by the Secretariat to make sure that they fall within national priorities, but the day-to-day selection and analysis of the projects should be left to the Secretariat. The Secretariat should acquire staff trained in environmental impact analysis.

6.3.3 The Technical Assistance Team should spend a significant proportion of its time training Secretariat staff in monitoring and evaluation of projects. They should also train staff in the environmental impact analysis of projects. It may be useful to include an Environmental Specialist in the TA Team, either short term or long term.

6.3.4 The Technical Assistance team should from the very inception set up a system to monitor the impact of the program. One way to do so would be monitor a selected representative cross-section of households over time.

6.3.5 A project to strengthen grass-roots cooperatives must be funded. This project should focus on building independent cooperatives to provide competition to the official system. This should spur the existing system to much needed reforms.

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

The Agriculture Sector Development Grant Program (ASDG) is one of the best conceived and designed programs undertaken in the region by USAID. It was a rather bold initiative and the overall findings of the Evaluation Team indicate that it was an initiative that was well worth it. Both the USAID Mission and the Government of Niger (GON) are to be commended for the success of the program.

The ASDG was conceived at a period when world Uranium prices fell and Niger was sharply affected. By 1983, the current account deficit had risen to 31.2 billion Francs CFA or 4.5% of GDP.¹ Gross official international reserves had fallen to 21.7 billion Francs CFA and the trade deficit had risen to 26.0 billion Francs CFA. The ASDG was one of three stabilization/sectoral adjustment programs undertaken by the GON during the period (excluding transfers from the French Treasury).

The International Monetary Fund (IMF) provided a standby arrangement for Niger from August, 1984 to December, 1987. GON also entered into a three year SDR 21 million structural adjustment facility (SAF). The IBRD also provided a structural adjustment credit for the period 1986 to 1988 amounting to \$68 million. ASDG's total commitments after the fifth amendment amounted to over \$44 million. Thus, ASDG was a very important component of GON structural adjustment and stabilization efforts.² The policy thrusts of the IMF, World Bank and the USAID adjustment programs were similar, with the effect that they reinforced and strengthened each other.³

ASDG funding sources and amounts are summarized by end use in Table 1-1. The funds were committed over a four year period which included the original grant agreement and five amendments. The commitment history is summarized in Table 1-2.

The conditional resource transfers represent a significant part of total GON investments in agriculture and rural

¹ See Statistical Appendix to IMF Report SM/88/265, Washington, D.C., December 5, 1988.

² Indeed, much larger than the IMF SAF.

³ For a detailed discussion see USAID Program Assistance Approval Document, Amendment Two, August, 1988.

Table 1-1

USAID - Niamey : Agricultural Sector Development Grant (ASDG) Program
Sources and End Use of Funding in Thousands of Dollars

Category of Expenditures	Source of Funding			Total
	Sahel Development Development Fund for		ESF	
	Program	Africa		
Conditional Dollar Disbursement	\$18,637	\$4,900	\$16,278	\$39,815
Technical Assistance	\$3,007	\$200		\$3,207
Policy Studies, Seminars and Workshops	\$722			\$722
In-Service Training and Support	\$38			\$38
Evaluation	\$173			\$173
Audit	\$60			\$60
Total	\$22,637	\$5,100	\$16,278	\$44,015

Source: Grant Agreements, PAAD, and PAAD Amendments.

Table 1-2

Commitments of Funds under Agriculture Sector Development Grant (ASD)
in Thousands of Dollars

Agreement	Date	Amount	Cumulative Total
Original Grant Agreement	August 31, 1984	\$10,000	\$10,000
First Amendment	July 5, 1985	\$9,500	\$19,500
Second Amendment	July 24, 1986	\$9,873	\$29,373
Third Amendment	August 4, 1986	\$2,627	\$32,000
Fourth Amendment	August 18, 1987	\$6,915	\$38,915
Fifth Amendment	August 29, 1988	\$5,100	\$44,015
Total		\$44,015	

Source: Grant Agreements.

development. The following illustrates the importance of the ASDG contribution and is taken from the PAAD Second Amendment. The figures for 1989 are of course tentative as the Fiscal Year 1988-89 is not completed.

Table 1-3

Impact of ASDG Resource Transfers on Total Government Investments in Agriculture and Rural Development (in million FCFA)

<u>Year</u>	<u>Total GON Investment in Agriculture & Rural Development</u>	<u>ASDG Resource Transfer</u>	<u>ASDG Share of Total</u>
1984	21,656	2,101	9.7%
1985	21,712	3,000	13.8%
1986	31,215	3,368	10.8%
1987	36,954	3,600	9.7%
1988	38,254	1,656	4.3%
1989	42,939	2,114	4.9%

Source: PAAD Second Amendment.

The figures in Table 1-3 illustrate the importance of the ASDG contributions to the total rural sector investments particularly in the early years of the program when GON was facing major difficulties. This of course excludes the fact that the ASDG Counterpart Fund provided a catalyst for investments by other donors in the sector as these funds could be used for local cost financing of projects.

The brilliance behind ASDG Program design lies in the fact that, as long the projects funded by the Counterpart Fund correspond to the average quality of USAID projects in Niger, the Program incorporates the benefits from the externalities of the policy reform as well as the benefits from the individual projects. Thus, the success of the management of the counterpart fund in identifying proper projects is a very important determinant of the overall success of ASDG. Problems in the management of the Counterpart Fund and suggested solutions are discussed in Chapter 4.

ASDG tied only 10% of the funds to purchases from a specific source. Thus, unlike other bilateral assistance programs, projects funded through ASDG counterpart funds are able to buy whatever they require from the best and cheapest sources.

1.2 Findings of the Mid-Term Evaluation

The mid-term evaluation was carried out two years after the start of the program. It found that most of conditionalities in policy reform were being met, with certain exceptions. These included the ban on exports of livestock, which has since been lifted, and the provision of free fungicides provided to cotton growers. The latter is no longer a responsibility of the Centrale d'Approvisionnement.

The mid-term evaluation found the management at the Counterpart Fund Secretariat to be weak, and specifically recommended replacement of the incumbent. That has been done. Additional technical staff has been added to the Secretariat to improve its operating efficiency. The mid-term evaluation also recommended that the counterpart fund follow strict benefit-cost criteria in determining which projects to fund. This process has been started but has not been fully implemented.

The mid-term evaluation made specific recommendations on ways the management of the program at USAID-Niamey could be strengthened. Most of those recommendations have been carried out.

1.3 Organization of This Report

This report is organized into six chapters. This introduction is followed by four chapters each of which focuses on one or more of the four components of ASDG, i.e. policy reforms, macro-economic impact, counterpart funds and technical assistance.

Chapter 2 focuses on all the policy reforms with the exception of the seed program. The latter is still at the planning stage and is therefore better discussed as part of the Technical Assistance component in Chapter 5. Chapter 3 examines the macroeconomic impact of the ASDG program on variables such as budget deficit, trade deficit, investment and GDP. Chapter 4 focuses on the Counterpart Fund, particularly dealing with issues such as the management of the fund in the monitoring and evaluation of projects funded. Some specific projects are also discussed. Chapter 5 deals with the Technical Assistance component. The last Chapter is an attempt to summarize the lessons from ASDG. Based on this analysis, a future ASDG-type program is proposed.

CHAPTER TWO : AGRICULTURAL POLICY REFORMS

2.1 Introduction and Organization

This Chapter will analyze the various policy reforms which were conditions for ASDG. Each of the policy reforms will be examined to see if the conditionalities were met and with what effect. This will be done by comparing the actual experience with the objectively verifiable criteria established in the log-frame. If these criteria were not met, the reasons for that will be explored. Before proceeding to the actual reforms themselves, this chapter starts off by examining the recommendations of the Interim Evaluation. It then proceeds to an analysis of the cooperative movement in Niger in Section 2.2. This is essential because a great many of the reforms proposed require active participation by the cooperative movement. Section 2.3 tackles the issue of the agriculture input markets, while section 2.4 deals with the grain market. Section 2.5 covers the issue of border trade and Section 2.6 deals with the issue of rural credit. Finally Section 2.7 takes up the impact of the reforms on macroeconomic indicators and various economic groups. Section 2.8 provides conclusions and recommendations.

The seed program was added to ASDG with the fifth amendment to the grant agreement. The Technical Assistance Team has just developed an action plan. The activities remain at the planning stage and no action has yet been taken. The Evaluation Team decided that the discussion of the seed program was best left to the Chapter dealing with the Technical Assistance component, rather than being included in the Policy Reform Chapter.

First, we take up the conclusion and recommendations of the mid-term evaluation. The mid-term evaluation noted that while progress was being made in reducing overall subsidies, there was little movement on the removal of fungicide/pesticide subsidies. The evaluation also noted that a revolving fund should be established in the Centrale d'Approvisionnement (CA) to ensure payment of operating costs. This last has been made unnecessary by increased donor grants to the CA which seem likely to continue. The surpluses generated by these donor grants are not strictly speaking for the CA to use, but they have been used to cover operating costs. A final legal determination needs to be made.

The mid-term evaluation also recommended a tender and bid system for the sale of grains. These sales are important only during periods of shortages; since the mid-term evaluation there have been so such crises. Also, with the liberalization of the grain trade, the role of the Office des Produits Vivriers du Niger (OPVN) has been reduced to managing the food reserve and food aid. Furthermore, only in January, 1989 with help from outside was the OPVN able to organize a true tender for the

purchase of grains. The tender and bid system may be implemented in grain sales in the future, but the present evaluation team believes that it is unnecessary in an environment of liberalized grain markets. All the OPVN has to do is sell at the prevailing market price. Judicious selling at the market price will keep prices from going up sharply to the detriment of consumers.⁴

The mid-term evaluation recommended that attention be given to help develop the cooperative system. As yet a suitable legal framework allowing cooperatives to function as business entities has not been established, though there seems to be no objection in principle. The issue will be discussed in the following Section. The mid-term evaluation recommended lifting the ban on livestock exports. That has been done. Furthermore, it recommended that the government design a strategy to effectively transmit policy reform to all levels of government. This takes time and continued pressure. The legal basis for controlling grain trade no longer exists but local law enforcement personnel still take it upon themselves to try to control movements for a variety of reasons. Nevertheless, the number of check-points has been reduced and the lack of a legal basis for such checks tends to give traders more leverage.

The mid-term evaluation also recommended that a legal framework be established allowing credit unions to function. The exact wording in the fourth amendment to the grant agreement was to "take appropriate actions in line with the conclusions of the agricultural credit study, to encourage the development of rural financial markets". Significant progress has been made in that direction, as will be discussed in Section 3.6.

2.2 The Cooperative Movement in Niger

The cooperative movement in Niger and other Francophone West African states bears little resemblance to what would be considered a cooperative in the U.S. or elsewhere. It is not an independent grass-roots movement. On the contrary, it is imposed hierarchically from above. The legal code does not allow for the development of independent cooperatives outside the framework of the official cooperative system except when allowed in the context of special projects (e.g. the GON/Cooperative League of the U.S.A. [CLUSA] project).

⁴ There has been little likelihood of sharp price rises in recent years due to a series of good harvests.

Cooperatives have been set up by administrative decision, originally to help government agriculture marketing agencies.⁵ Peasants are unenthusiastic about cooperatives because they generally bring little benefit to them. Furthermore, the hierarchical structure drains surpluses from the peasants. For example, in theory during the 1985-86 buying season the cooperative union received a gross margin to cover operating costs.⁶ After covering marketing costs including salaries and transport, the net margin was divided as follows:

Union Regional des Cooperatives	57.5%
Union Sous-Regional des Cooperatives	10.0%
Union Nationale des Cooperatives	31.5%

Little wonder that the average farmer has little loyalty to the cooperative movement. Theoretically, most funds appropriated by the URC were for investment and management, but individual cooperators have little control over or confidence in these groups.

The data in Table 2-1 shows the structure of the cooperative movement. The Groupement Mutualiste Villageois (GMVs) is the only part of the cooperative movement that represents the traditional notion of a cooperative. What is called a cooperative by the hierarchy is not really a cooperative but the lowest level of the hierarchy above the individual groups or GMVs. A quick look at the table shows that the growth in the hierarchy has far exceeded the growth in the number of individual groups since 1984 when the movement was officially made independent of government control. Interestingly, the groups in charge of the movement functioned like any other bureaucracy increasing its structure faster than its membership (i.e. overhead costs per individual members or GMVs increased).

Not only does the structure look like a centralizing bureaucracy but also in many cases it functions like one. During the January, 1989 grain tender, it instructed its constituents what price they were to set. The whole concept of the cooperative movement has been turned upside down. Thus, any policy reform measures which aim to increase participation by cooperatives may end up moving the system from one bureaucracy to another for no good reason, until and unless the cooperative

⁵ There are some solid reasons behind this, importantly, the need to mobilize peasants to work on mutually beneficial projects. But such peasant organizations should not be confused with a true cooperative movement, as they are in Niger.

⁶ See Page 11 of First Phase Cooperative Cereal Marketing Study by Eric J. Arnould, ASDG TA Team, Ministry of Agriculture, DEPSA, Niamey, December, 1987.

Table 2-1

Evolution of the Cooperative Movement in Niger

Category	Geographic Limits	1984	1988	Growth '84-'88
Union National (UNC)	Niger	1	1	
Union Regional (URC)	Department	7	7	
Union Sous-Regional (USRC)	Commun/Arrondissement	40	42	
Union Local (ULC)	Canton	223	250	2.9%
Cooperative (1)	Village or Group of Villages	1171	1344	3.5%
Groupement Mutualistes(GMV)	Quartier or Small Village by Special Functions	10695	11423	1.7%

Notes:

1. Cooperative in this case are not the traditional sense of the cooperative. It is a geographically/demographically defined arbitrary group.
2. GMVs come as close to the traditional meaning of cooperatives as possible in the existing context in Niger.

Source: Calculated based on data provided by the Union Nationale des Cooperatives

movement is reformed. The transfer of the Centrale d'Approvisionnement to the Union Nationale des Cooperatives would mean little effective change until the whole cooperative movement is revamped.

There are some positive elements in the present situation. The cooperatives (or rather GMVs) developed by the GON/CLUSA project are now better able to function independently. Changes in the legal code to allow independent organizations of cooperatives outside the official hierarchy are essential. Only when the official structures face a challenge from competing independent structures will they be reformed.⁷ Furthermore, the legal code must be changed to allow these cooperatives to function as economic units outside the official hierarchy. A legal code is under review at the inter-ministerial level which may allow that to happen. The code under review does not envisage independent cooperatives outside the official structure. The new legal code is expected to be released about the end of February. This code is expected to provide individual cooperatives or GMVs rights to develop their own charters. It is not yet clear how independent they will be allowed to be. If complete independence is allowed then membership in the UNC even if obligatory will not be a serious problem.

The success of the GON/CLUSA cooperatives stems from three sources: even though they are part of the official UNC system, they have been given functional independence; they have access to financial guarantees outside the UNC system; and they have been given training in motivational and management skills. If the new charter provides the first and gives the individual cooperatives of GMVs the right to contract financial obligations on their own, then the third element will still be required at least in the initial stages.⁸ The training services need to be provided on a continual long-term basis.

It is essential for the future of Niger that the cooperative movement develop into a strong independent force. In order for that to happen individuals must see an economic advantage in

⁷ Senegal allowed the organization of independent cooperatives and the independent cooperative movement ended up rivalling the official peasant organizations. This had a very positive impact, as the official movement was forced to change its mode of operation and become more responsive to the needs of its members.

⁸ The Evaluation Team believes that if the right to contract financial obligations is given, the development of the credit union system will provide the means to do so. This will of course happen if the Credit Union management has faith in the managerial skills of the cooperative.

participation. As long as the top heavy hierarchy drains all surpluses, there is little incentive on the part of the individuals to join and support the movement. There is a need to develop independent cooperatives all over Niger to enable rural populations to play their proper role in national development. More projects to develop individual cooperatives able to play independent roles are essential. The dissolution of the present hierarchy, allowing the GMVs to develop their associations as they see necessary, would also help. Without these steps, the success of any agriculture sector reforms which require cooperative participation is likely to be limited.

2.3 Reduction of Agricultural Input Subsidies and Restructuring of the Input Distribution Agency

2.3.1 Background and Objectives of the Reforms

Agriculture inputs in Niger have been distributed historically by an official input supply agency, the Centrale d'Approvisionnement (CA). ASDG had two basic goals in the area of agricultural input distribution. The first goal was to reduce the level of subsidies. The second was to restructure the agriculture input markets so that the private sector would have a larger share of the input market.

The rationale behind the first objective was a dual one. Reduction of subsidies would not only reduce pressure on the government budget but also would remove the budgetary constraint on the supply of inputs (subsidized inputs are supply constrained by the government's ability to budget for the subsidy). Furthermore, subsidies may produce economic inefficiencies such as relatively greater use of subsidized inputs which may have a higher economic cost relative to other inputs. Thus, removal of subsidies would increase economic efficiency in the agricultural production process.

The second objective was designed to increase competition and also improve the internal efficiency of the CA. This was to be achieved by spinning the CA off from the government as an independent agency. The rationale was to improve internal efficiency by making CA financially independent and unable to access government guaranteed credit. The restructuring also included reforms which would increase the market share of the private sector. The combination of a more efficient CA with increased competition from the private sector was expected to move the input marketing system towards economic optimality.

2.3.2 Objective Criteria Established in the Project Log-Frame

The objective criteria established in the log-frame were to ensure that by end of the program the average rate of input

subsidy declined to 15% or less. The grant agreement defined the targets more specifically as follows:

<u>Conditions To Be Met</u>	<u>Average Subsidy</u>
Preceding First Tranche	Not Fixed
Preceding Second Tranche	50%
Preceding Third Tranche	30%
Preceding Fourth Tranche	25%
End of Program	15%

The last condition was added in an amendment to the original grant agreement. Also required in the program was that at no time would the subsidy on any individual item exceed 50% without a specific exemption. Furthermore, with regard to the restructuring of the input supply agency, the log-frame required significant progress towards converting the CA into a cooperatively owned input supply entity in competition with private merchants and traders. This was to be achieved prior to the disbursement of the third tranche. Before the fourth tranche, appropriate action was required to move the CA closer to being an independent cooperatively owned entity to ensure the existence of competition between private traders and the CA by not granting the CA a monopoly, de jure or de facto, in the supply of inputs.

2.3.3 Implementation of Policy Reforms

Reforms in the Overall Subsidy Levels

The Evaluation Team found generally that the objective criteria were met before the various tranches were disbursed. The targets of the exact level of subsidies by some definitions were exceeded. Tables 2-2 to 2-4 demonstrate the changes in the input subsidy system.

The net subsidy level that should be used to determine if targets have been met excludes subsidies on agriculture equipment. These have been on a "vente promotionnel" (or fire-sale) almost since the beginning of the ASDG program. The sale was organized to reduce large inventories.

Table 2-4 summarizes the evolution of average subsidy levels over time under different conditions. Donors have been providing fertilizer to the CA in the last few years. If the CA's cost is used as a benchmark, overall subsidy levels are negative for all inputs. The CA was actually running a substantial operating surplus. Thus, the budgetary constraint rationale for removing subsidies is not an issue as long as the CA is able to continue using surpluses generated from the sale of donor fertilizer (though it does not have formal authorization to do so). This may change over time, but it is likely that the donors will continue to supply free fertilizer to Niger.

Table 2-2

Volumes and Subsidies on Agriculture Inputs sold by Centrale d'Approvisionnement

Item	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
----- Volumes -----						
EQUIPMENT (UNITS)						
Tool Bar	6,827	2,596	3,743	923	1,055	201
10" Plow	2,684	555	1,030	620	646	123
5 teeth Cultivator	2,107	1,127	772	211	219	29
3 teeth Cultivator	2,462	716	1,283	236	181	56
Lifter/Weeder	3,634	1,383	264	119	358	131
Donkey Drawn Cultivator	912	227	199	183	25	71
Seeder	457	546	29	3	13	0
Oxen Cart	5,366	2,171	1,909	144	560	315
Donkey Cart	2,999	820	743	114	300	802
FERTILIZER (in tons)						
Urea	3,493	1,812	2,161	3,447	2,955	2,071
Simple Super Phosphate	6,999	2,360	2,128	1,136	415	581
Triple Super Phosphate	681	137	47	279	764	256
15-15-15	1,772	1,130	2,056	2,504	2,232	1,754
Others	59	14	113	92	50	150
TOTAL	13,004	5,453	6,504	7,458	6,416	4,812
TAHOUA ROCK PHOSPHATE	666	1	730	487	11	19
FUNGICIDES('000s 25 gm.packet)	1,373	1,192	1,875	898	707	729
INSECTICIDES (liters)	N.A.	N.A.	54,437	34,064	63,176	64,868
----- Estimated Subsidy in Percent -----						
EQUIPMENT						
Tool Bar	68%	67%	50%	88%	88%	87%
10" Plow	70%	68%	50%	72%	72%	72%
5 teeth Cultivator	79%	67%	50%	85%	85%	85%
3 teeth Cultivator	73%	69%	50%	91%	92%	92%
Lifter/Weeder	66%	67%	50%	96%	95%	95%
Donkey Drawn Cultivator	44%	42%	34%	43%	44%	36%
Seeder	67%	67%	59%	91%	92%	0%
Oxen Cart	-12%	-23%	-42%	86%	87%	89%
Donkey Cart	33%	27%	17%	85%	86%	84%
FERTILIZER						
-In International Prices	85%	84%	83%	78%	75%	75%
-Nigerian Reference Price	9%	6%	0%	-29%	-44%	-40%
TAHOUA ROCK PHOSPHATE	58%	59%	59%	49%	49%	49%
FUNGICIDES('000s 25 gm.packet)	17%	14%	5%	3%	-3%	-3%
INSECTICIDES (liters)			34.7%	16.7%	0.0%	0.0%

Notes:

1. Special sales on existing stocks of agriculture equipment effectively increased the implicit subsidy on those items.

Source: Consultant estimates based on CA Reports.

Table 2-3

Costs and Revenues for Different Agriculture Inputs sold by Centrale d'Approvisionnement

Item	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
----- Estimated Revenues from Sales in Millions of Francs CFA -----						
EQUIPMENT						
Tool Bar	41.0	16.4	31.6	2.0	2.2	0.4
10" Plow	16.1	3.7	9.3	3.4	3.5	0.7
5 teeth Cultivator	12.6	10.3	9.5	0.8	0.9	0.1
3 teeth Cultivator	11.1	4.0	9.7	0.3	0.2	0.1
Lifter/Weeder	13.6	5.2	1.3	0.1	0.2	0.1
Donkey Drawn Cultivator	10.9	2.9	2.5	2.1	0.3	0.8
Seeder	12.4	15.4	0.9	0.0	0.1	0.0
Oxen Cart	414.3	190.0	167.0	1.3	4.9	2.8
Donkey Cart	196.1	60.0	54.4	1.5	4.0	10.6
FERTILIZER						
Urea	174.7	90.6	108.0	206.8	192.1	134.6
Simple Super Phosphate	245.0	82.6	85.1	51.1	18.7	26.1
Triple Super Phosphate	30.6	6.2	2.1	19.5	57.3	19.2
15-15-15	79.7	50.9	92.5	150.2	145.1	114.0
Others	2.7	0.6	5.1	5.5	3.0	9.0
TOTAL	532.7	230.8	292.9	433.2	416.1	303.0
TAHOUA ROCK PHOSPHATE	18.6	0.0	20.4	17.0	0.4	0.7
FUNGICIDES	68.7	71.5	112.5	58.3	49.5	51.0
INSECTICIDES	N.A.	N.A.	54.4	51.1	120.7	123.9
----- Costs in Millions of Francs CFA -----						
EQUIPMENT						
Tool Bar	127.8	49.9	63.3	16.5	19.1	3.2
10" Plow	53.6	11.6	18.6	11.8	12.5	2.4
5 teeth Cultivator	59.2	31.5	19.0	5.5	5.8	0.8
3 teeth Cultivator	41.3	12.8	19.4	3.8	2.9	0.9
Lifter/Weeder	40.0	15.7	2.6	1.3	3.8	1.4
Donkey Drawn Cultivator	19.5	5.0	3.8	3.7	0.5	1.3
Seeder	37.8	46.6	2.2	0.2	1.0	0.0
Oxen Cart	371.4	154.2	117.4	9.1	37.5	24.8
Donkey Cart	293.8	82.7	65.4	10.2	28.4	66.6
FERTILIZER						
Urea	960.6	489.2	572.7	896.3	753.5	517.8
Simple Super Phosphate	1,924.7	637.2	563.8	295.2	105.8	145.3
Triple Super Phosphate	187.3	37.0	12.4	72.5	194.8	64.0
15-15-15	487.3	305.1	544.8	651.1	569.2	438.5
Others	16.2	3.8	30.0	23.9	12.8	37.5
TOTAL ECONOMIC COST						
-International CIF Niamey	3,576.1	1,472.3	1,723.6	1,939.0	1,636.1	1,203.0
-Nigeria CIF Niamey	585.2	245.4	292.7	335.6	288.7	216.5
TAHOUA ROCK PHOSPHATE	44.6	0.1	50.1	33.4	0.8	1.3
FUNGICIDES	82.4	83.3	118.1	60.1	48.1	49.6
INSECTICIDES	N.A.	N.A.	83.3	61.3	120.7	123.9

Source: Consultant estimates based on CA Reports.

Table 2-4

Operating Costs, Revenues and Average Total Subsidy Levels for the
Centrale d'Approvisionnement 1982-1987 (Millions of Francs CFA)

Costs and Revenue	1982-83	1983-84	1984-85	1985-86	1986-87
Cost of Material Purchased	1,786.9	586.1	614.0	250.0	88.0
Operating Costs					
Costs of Fertilizer at Int'l. Prices	1,472.3	1,723.6	1,939.0	1,636.1	1,203.0
Costs of Fertilizer at Govt. Prices			447.5	537.8	329.6
Costs of Fert.at Nigeria Prices			335.6	288.7	216.5
Costs of Agriculture Equipment			324.1	336.6	342.8
Costs of Non-Fertilizer Items	797.1	365.0	174.2	281.2	288.1
CA Operating Costs	528.0	510.6	443.2	439.7	294.9
Total Operating Costs	2,000.3	2,234.2	2,382.2	2,075.8	1,497.9
-Above at Govt. Prices for Donor Fert.			1,064.9	1,258.6	912.6
-Above at Nigeria Prices for Donor Fert.			953.0	1,009.6	799.6
-Above at Int'l. Prices for Donor Fert.	2,797.4	2,599.2	2,556.4	2,357.0	1,786.0
Revenue					
-Receipts from Sales inc.Agric.Equipment	610.3	766.5	571.1	602.9	494.0
-Receipts from Sales of Agric.Equipment			47.4	47.4	47.4
-Contribution by FNI & CSPPN	300.0	550.0	388.7	208.8	0.0
Market Value of Donated Fertilizer					
-Above at Govt. Prices			447.5	537.8	329.6
-Above at Nigeria Prices			335.6	288.7	216.5
-Above at Int'l Prices			1,939.0	1,636.1	1,203.0
Total Revenue Exc.Donor Contrib.	910.3	1,316.5	959.8	811.7	494.0
Total Revenue Inc.Donor at Int'l. Prices			2,898.8	2,447.8	1,697.0
Net Operating Position Exc.Donor Contrib.	(1,887.1)	(1,282.8)	(1,596.6)	(1,545.3)	(1,292.0)
Net Operating Position Inc.Donor Contrib.			342.4	90.8	(89.0)
Average Level of Direct & Indirect Subsidy excluding Agriculture Machinery					
- Subsidy Rate "A"			-28%	-19%	-14%
- Subsidy Rate "B"			29%	40%	22%
- Subsidy Rate "C"			17%	17%	2%
- Subsidy Rate "D"			77%	73%	69%
Average Level of Direct & Indirect Subsidy including Agriculture Machinery					
- Subsidy Rate "A"			-13%	-4%	5%
- Subsidy Rate "B"			46%	52%	46%
- Subsidy Rate "C"			40%	40%	38%
- Subsidy Rate "D"	78%	71%	78%	74%	72%

Notes:

1. Agriculture Equipment on Vente Promotionnel (fire sale) from 1984-85 at request of donors.
2. Subsidy Rate "A" includes donor fertilizer both revenue and costs sides.
3. Subsidy Rate "B" sets the costs of donor contributed fertilizer at the internal transfer price negotiated between donors and the Government.
4. Subsidy Rate "C" sets the costs of donor contributed fertilizer at the landed prices of Nigerian Fertilizer of 45,000 Francs CFA per ton.
5. Subsidy Rate "B" sets the costs of donor contributed fertilizer at the CIF Niamey prices.

Source: Consultant estimates based on CA Reports.

However, in economic analysis as opposed to financial analysis, the "free good" must be valued at a relevant price. The principal debate here is over the relevant benchmark economic price. There are three candidates for benchmark economic price: first, the price at which the CA sells fertilizer in the market; the second is the CIF Niamey price of fertilizer imported from international sources; and the third is the landed price of Nigerian fertilizer in Niamey. The first candidate is the price at which the government makes available donor fertilizer available to the CA. This is negotiated between donors and the government. The second price is very high. Most researchers in Niger reject it as a benchmark, and insist that the landed cost of Nigerian fertilizer should be the standard. The theoretical justification for the use of this price is that it is the price at which the free market supplies fertilizer in Niger.

The Nigerian price is the benchmark on which the High Committee and others concerned with the implementation of ASDG CPs (conditions precedent) have been focusing. Therefore, the assessment of whether the program met the log-frame targets has to be based on this reference price. Using the Nigerian price as a benchmark, the target levels for the reduction of subsidy have been well exceeded. The overall subsidy level was 2% in 1987 for all products (except agriculture equipment on sale) sold by the CA. This was well ahead of the target of the 30% for that year established in both the log-frame and the grant agreement.⁹

The dispute over the need for subsidies is based on the assumption that fertilizers, fungicides, and pesticides are important cost elements in agricultural production. Outside of rice and cotton cultivation in irrigated areas, this is not true. The cost of fertilizers, fungicides and pesticides amounts to a very small percent of the overall cost of production of the farmers, even when valued at international prices as shown in Table 2-5. The data in this table is drawn from field surveys of farmers carried out under USAID funding in 1983-84 and 1984-85 cropping seasons. The percent of cash expenditures devoted to fertilizers, fungicides and pesticides in the production of sorghum, millet, and cowpeas ranges from one percent to three percent valued at the subsidized prices. Even when these inputs

⁹ However, Nigeria heavily subsidizes fertilizer and the Nigerian price cannot be used as the true economic cost of the fertilizer. It is likely that Niger will be able to secure as much fertilizer as it needs from Nigeria, but there remains the possibility that Nigeria may decide to eliminate fertilizer subsidies. Therefore, international prices should be the frame of reference. Using international prices as a benchmark, there has been a gradual reduction of the overall subsidy level since ASDG started.

Table 2-5

Fertilizer, Pesticides and Fungicides as a Proportion of Farm Budgets

Cropping System	Traction	Year	Cash Costs per CFA/Hectare				Total Cash
			Fungicide Cost	%	Fertilizer Cost	%	
Millet monocrop							
-at Local Prices	Manual	1983-84	37	1.6%	43	1.8%	2333
-at International Prices	Manual	1983-84	39	1.6%	194	7.8%	2485
	Manual	1984-85	0	0.0%	0	0.0%	1713
Millet monocrop							
-at Local Prices	Oxen	1983-84	130	3.1%	21	0.5%	4198
-at International Prices	Oxen	1983-84	137	3.2%	95	2.2%	4278
	Oxen	1984-85	0	0.0%	0	0.0%	3940
Sorghum monocrop							
-at Local Prices	Manual	1983-84	47	3.5%	0	0.0%	1347
-at International Prices	Manual	1983-84	49	3.7%	0	0.0%	1349
	Manual	1984-85	0	0.0%	0	0.0%	1940
Sorghum monocrop							
-at Local Prices	Oxen	1983-84	43	1.4%	0	0.0%	3010
-at International Prices	Oxen	1983-84	45	1.5%	0	0.0%	3012
	Oxen	1984-85	0	0.0%	0	0.0%	2980
Millet-Sorghum							
-at Local Prices	Manual	1983-84	23	1.3%	0	0.0%	1743
-at International Prices	Manual	1983-84	24	1.4%	0	0.0%	1744
	Manual	1984-85	0	0.0%	0	0.0%	1940
Millet-Sorghum							
-at Local Prices	Oxen	1983-84	74	2.2%	23	0.7%	3343
-at International Prices	Oxen	1983-84	78	2.3%	104	3.0%	3427
	Oxen	1984-85	0	0.0%	0	0.0%	3416
Millet-Cowpea							
-at Local Prices	Manual	1983-84	10	0.6%	0	0.0%	1782
-at International Prices	Manual	1983-84	11	0.6%	0	0.0%	1783
	Manual	1984-85	0	0.0%	0	0.0%	2083
Millet-Cowpea							
-at Local Prices	Oxen	1983-84	16	0.5%	71	2.1%	3343
-at International Prices	Oxen	1983-84	17	0.5%	320	8.9%	3592
	Oxen	1984-85	0	0.0%	0	0.0%	3798
Millet-Sorghum-Cowpea							
-at Local Prices	Manual	1983-84	17	0.6%	0	0.0%	2936
-at International Prices	Manual	1983-84	18	0.6%	0	0.0%	2937
	Manual	1984-85	0	0.0%	0	0.0%	2827
Millet-Sorghum-Cowpea							
-at Local Prices	Oxen	1983-84	6	0.2%	0	0.0%	3125
-at International Prices	Oxen	1983-84	6	0.2%	0	0.0%	3125
	Oxen	1984-85	0	0.0%	0	0.0%	3418

Source: Calculated from data in Cropping Systems Budget for South Central Niger, by Scott Swinton, January, 1988.

are valued at International CIF Niamey prices, the percent of cash expenditures devoted to fertilizers, pesticides and fungicides in farming a typical hectare ranges generally from two percent to five percent. This implies that the argument for subsidies is based on assumptions which are far from the reality faced by most Nigerien farmers. Thus, even if fertilizer were sold at international prices in the market, the impact on most Nigerien farmers would be negligible.

Despite the findings above which show that fertilizer, pesticides, and fungicide subsidies are really unimportant for most farmers in Niger, historically, significant resources have been devoted to such subsidies. In recent years subsidies on pesticides and fungicides have been eliminated following the protocol laid out in the ASDG agreement. But the government continues to supply free pesticides and fungicides to cotton farmers even though the subsidy levels on pesticides sold in the market have been more or less eliminated since the ASDG program started. The subsidies on fungicides have also been eliminated.

The government insists that fertilizer and pesticides subsidies be maintained to encourage the production of rice and cotton. In this they are backed by several donors. As long as donors are willing to subsidize these inputs, USAID insistence on removing subsidies for inputs used in the production of cotton and rice are likely to be ignored. These subsidies of course do not pose an extra burden on the national budget since the inputs are supplied free by donors. Thus, as long as there is no drain on the national budget, USAID has little choice but to accept the status quo on input subsidies. The original project paper defined budgetary limitations as a key rationale behind the need to eliminate input subsidies. In this sense the spirit and letter of the agreement have been maintained.¹⁰

Restructuring of the Centrale d'Approvisionnement and the Agriculture Inputs Market

The grant agreement and the log-frame specified that the Central d'Approvisionnement be made an independent cooperatively owned entity. The government published an arrete transferring the control of the CA to the Union Nationale des Cooperatives (UNC). There are many problems in the functioning of the UNC and the cooperative movement in Niger which need to be remedied before it can function as a true cooperative movement. These issues are discussed in Section 3.3. But the government has honored the agreement to transfer the CA to the cooperative movement and therefore met the objectives stated in the log-frame and the grant agreement. There is now a need to reform the cooperative

¹⁰ Except for the free pesticides still given to cotton farmers.

movement in the country before the benefits of the transfer to the cooperatives envisaged in the original project paper can be achieved. Thus, any future grant of this type must focus on the reform of the cooperative movement as a policy objective.

The restructuring was also expected to increase the private sector share of the agriculture inputs market. This seems to have happened. The data in Table 2-5 show that use of fertilizer, pesticides and fungicides in Niger varies with rainfall. There is no use of these inputs in the 1984-85 crop season which was a drought year. Thus from this survey it is clear that the demand for purchased inputs varies directly with the rainfall. If we use rainfall as a proxy for growth in demand, the demand for fertilizer, pesticides, and fungicides should have risen sharply in 1985-86 and 1986-87. Yet the data in Table 2-2 show that the CA sales fell sharply during the period despite increasing demand. Therefore, the share of the private sector in the agriculture inputs markets should have risen sharply. Accordingly, one major goal of ASDG has been achieved.

This may be stated algebraically as follows:

"p" is private sector share sales of inputs,

"c" is CA sale of inputs,

"r" is the level of rainfall,

"d" is total demand for inputs,

Equation 1: $d = c + p$ or, $p = d - c$

Equation 2: $d = f(r)$ where, $f'(r) > 0$

When "r" increases, "d" will increase.

During 1984-85 to 1988-89, "r" increased therefore "d" increased. The data in Table 3-3 shows that during the same period "c" decreased. Thus, from equation 1, "p" increased. Therefore, during the ASDG period the share of the private sector in input markets increased, which was one key goal of the program to increase competitiveness in input markets. The absence of surveys before and after the reforms makes it difficult to say with complete certainty, but logic would suggest that this is true.

2.3.4 Conclusions on the Reforms in Agriculture Input Markets

Overall it must be considered that the government has implemented the reforms agreed upon. Most input subsidies have been removed and the government has taken steps to make the CA an

independent, cooperatively-run entity. The government however made the agreement on the implicit understanding that the Nigeria price should be the benchmark. On those grounds it has more than exceeded the requirements of the agreement.

2.4 Reform of Cereal Marketing

2.4.1 Goals of the Reform Program in Cereal Marketing

The principal goal of the reforms in the cereal marketing system was to promote competition in the grain market through liberalizing official marketing and pricing policies. The historic background to the reforms included quasi-monopoly status accorded to the major parastatal marketing agency Office des Produits Vivriers du Niger (OPVN). Furthermore, there was a legally binding administered uniform national price that was theoretically designed to protect consumers and producers.

ASDG designers identified four basic problems with the system:

- Ineffective Official Producer Prices: Official prices in many years were below the market level and thus did not provide much of an incentive to farmers. Even in periods where the prices were above the market level, the OPVN intervention usually came too late to benefit the bulk of the producers. Only those with no pressing cash needs (i.e. wealthier farmers and merchants) could afford to wait for the OPVN buying campaign. Furthermore, in deficit areas the official price tended to be below the market level and in surplus areas above the market level.

- Ineffective Price Stabilization: Official price stabilization can only succeed if the amount of commodity traded by the official agency represents a significant portion of the total volume traded in the market. OPVN interventions to stabilize prices failed for many basic reasons. The first was the administrative delay in interventions. Secondly, the very fact that its volume represented a very small proportion of the total amount marketed. This is particularly true because of the quasi-open border with Nigeria allowing Nigerian grain to dominate transactions in the Niger market in many years. A recent study shows that a large part of the grain in the Niamey market comes from Nigeria.¹¹ This is even more true now than at the project design phase due to the falling parity of the Naira against the CFA even in the unofficial markets.¹²

¹¹ Jossrand, Henri, Analyse de l'Evolution du mil vendu sur les marches de Niamey mi-Avril, 1986 a Fin Janvier, 1989.

¹² Furthermore, in many years food aid dominated the market depressing prices.

- High Cost of OPVN Interventions: OPVN lost almost 12.6 billion Francs (CFA) during 1978-83. These losses were almost inevitable because the government set a very low margin between producer prices and consumer prices to appear to favor both consumers and producers. This objective was usually defeated since the OPVN buying campaign was late, and consequently OPVN purchased generally from merchants rather than from producers.

- Poor circulation of information: Producers had little access to information about prices and supply, while the merchants did. Therefore, producers could not take fullest advantage of the fluctuations in the market even when they had a surplus.

ASDG proposed to remedy the situation through reforming the grain marketing system. This was to be achieved by abandoning nationwide official prices, instituting a tender and bid system at OPVN, liberalizing grain movements and trade, as well as collecting and publicizing grain prices.

2.4.2 Objectively Verifiable Criteria

The objectively verifiable criteria of the policy reform in cereal marketing include:

- removal of all restrictions and fiscal impediments on the movement of grain within the country, except requirements for professional licensing;
- reduction of the role of official grain marketing agencies in urban areas to that of managing the food reserve stock at the wholesale level, food aid handler, and supplier of cereals to collective consumers;
- establishment of a system of tender and bids by the official grain marketing agencies in order to encourage competition in the purchases and sales of grain from the agency. The target level was 40% of the agencies total transactions tendered during the life of the program;
- establishment of functional village level grain storage through arrangements with cooperatives; the target level was 6,000 tons during the life of the program;
- radio broadcasting of grain marketing situation at the arrondissement level. The target was to broadcast to 75% of the arrondissements during the life of the program; and
- abandonment of uniform national grain pricing.

These goals were written into the grant agreement (including subsequent amendments) and the conditions precedent (CPs) to disbursement of various tranches of the grant as follows. (The requirement for broadcasting prices was not made a CP even though it was in the grant agreement.)

<u>Tranche</u>	<u>Conditions Precedent</u>
Second	Establishment of a pilot system for tenders and bids for 20% of OPVN local purchases and sales of grain, to permit local traders and cooperatives to participate fully in the marketing of grain, including during the OPVN buying campaign period.
Third	Abolish uniform national pricing. Increase use of the tenders and bids in the local purchases and sales of grain by OPVN. Increase the use of village level grain storage banks towards the goal of 6000 tons of grain stored at the village-level through cooperatives and groupement mutualistes (GMVs).
Fourth	Maintain and further increase competition through use of tenders and bids for OPVN reserves and use of village level grain storage facilities.
End of Program	Village storage to reach 6,000 tons.

2.4.3 Implementation of Reforms

Uniform National Pricing

There have been no nation-wide millet or sorghum prices since the 1985-86 campaign. This made little difference to the market because over time the policy had been tempered due to a lack of resources (to effectively defend an official producer price the government has to stand ready to buy any quantity at that price at any time, which OPVN was unable to do). Thus, even though ministerial arretes continued to set producer prices, they were not really binding and even these were abandoned since 1985-86. Consumer prices were set on a more ad-hoc basis when prices were high during times of crisis. The need to do so has not arisen since 1984-85 due to relatively good harvests. The Government of Niger (GON) has effectively fulfilled the conditions of the grant agreement regarding the elimination of uniform national pricing.

Tenders and Bids System for Local Grain Purchases

OPVN introduced the tenders and bids system (T&B system) for the local purchase of food grains in 1985-86. However, OPVN paid more for its wholesale purchases than the prevailing retail prices due to the inefficient functioning of the T&B system. Even though there are many grain traders in the country, they operate mostly on informal markets. Most of them were either unable or unwilling to bear the extra cost to fulfill the requirements of the tender and bids system, and were ineligible to participate. The history of the three tenders in 1985-86 was dismal. Seven out of forty-one bidders qualified for the first tender, four out of thirty-six for the second tender and fourteen out of thirty-one for the third. Consequently, the lack of competition assured prices would be high. The University of Michigan TA Team report notes that in November, 1985 the OPVN could have bought 7,000 tons at prevailing retail prices for about 408 million Francs CFA but instead paid 572 million.¹³ This overcharge was economic rent realized by a small group of wholesalers. If OPVN had purchased the same amount at 75 Francs CFA/Kg, the price negotiated with the Union Regional des Cooperatives, the cost would have been 455 million Francs CFA. During the last contract in February, 1986 the T&B system did allow the OPVN to save money relative to what it would have paid at the officially negotiated price of 75 CFA/Kg. Even though OPVN paid about 192.5 million CFA over prevailing retail prices, the award prices were all below the so called "official" price. In effect, the T&B system saved 157.5 million CFA. Thus, while the global cost of the three tenders in 1985-86 was about 531.5 million CFA higher than the prevailing retail prices, OPVN did actually spend 110.5 million CFA less than it would have had the old official price buying system been used.

The objective of the T&B system was to encourage competition. By the end of the 1985-86, competitiveness increased and the system effectively saved OPVN 110.5 million CFA over the year. The savings would have been even greater if the OPVN had used a less restrictive qualifying system. Despite the improvement over the year, the full potential of the T&B system was not realized. Wholesale purchases of that magnitude under a T&B system should cost substantially less than retail prices.

These problems with the operation of the T&B system led the World Bank (which along with USAID was a strong supporter of the system) to hire a French company to conduct the 1988-89 exercise. This exercise was held in the beginning of January, 1989. There were 460 participants including many cooperatives. 56 bids were awarded at prices ranging from 43 CFA/Kg in Zinder to 55 CFA/Kg

¹³ Cereal Price and Marketing Policies, Version 2.0, ASDG TA Team, Ministry of Agriculture, Niamey, December, 1988.

in Tillaberi. Overall 12,000 tons were purchased, the bulk of which was purchased at prices ranging between 43 and 45 CFA/Kg. Thus, the bid prices were very close to the retail prices in the respective markets.

It must be noted that while many cooperatives bid, few actually won. Many cooperatives were effectively barred from participating because the legal code would not allow them to secure the bank guarantees necessary for the bid. To allow successful participation in grain marketing by the cooperative movement, changes in the legal code are necessary. The UNC also should not interfere with the process by trying to dictate the prices at which individual cooperatives should bid. They must be free to set their own prices. The UNC can help by making sure that cooperatives have access to updated price information.

Liberalization of Grain Trade

The government abolished the legally binding uniform national price for all cereals except rice. It also abolished the monopoly status of the Societe Nigerien des Arachides (SONARA). During the 1988-89 campaign, there have been no state monopolies or indicative prices on millet, sorghum, peanuts and cowpeas.

The OPVN's role has been reduced to essentially managing the reserve stock and handling food aid. The cooperative movement has been developing village level storage banks, but this remains relatively less attractive for cooperatives that have the management skills to undertake more profitable economic activities. Nevertheless, several cooperatives (though not as many as would be desirable) participated successfully in the January, 1989 tender to supply OPVN. The removal of the state monopolies and prices has made it easier for people to engage in the grain trade. However, the movement of grains within Niger is still subject to strict control by police, Gendarmerie, Garde Republicaine, and customs officials.¹⁴ A 1988 study shows that this results in direct economic transfer from one group to another (in effect, unofficial taxes).¹⁵ These controls increase the transactions cost of grain marketing and are an economic deadweight. The government can only tackle the problem through training security officials about the removal of controls on grain marketing. The legal basis for such checks has been removed, and they are much less frequent than before. However, for a variety of reasons, law enforcement personnel continue to

¹⁴ There are no official controls. Local law enforcement agencies have been informed, but old habits seem to persist.

¹⁵ "Study of Constraints to Increased Exports of Agropastoral Products in Niger", David Wilcock, Development Alternatives, Incorporated, January, 1988

carry out these checks which effectively increase the cost of trading in grain.

Collection and Diffusion of Market Prices

Information on prices is essential to the efficient functioning of a competitive market. This condition was attached to ASDG with a view to ensuring that smaller traders and cooperatives had as much access to information on spatial and temporal variation in prices as the larger traders did. This would allow them to compete by moving their goods to markets where prices were higher as well as holding their stock for sale at a more profitable period. The benefit would not only accrue to traders but also to consumers, who would be subject to fewer price fluctuations due to arbitrage. It must be noted that the Elliot Berg study noted that cereal markets in Niger were relatively efficient at handling temporal and spatial arbitrage.¹⁶ This arbitrage can function even more efficiently when all traders (and potential traders such as cooperatives) have access to accurate and timely price information.

The GON has long collected price information and it continues to do so. In January, 1987 the Ministry of Agriculture began publishing a summary every two weeks, presenting relevant information on rainfall, official stocks, prices, etc. This information would be highly useful if disseminated widely, but at present its circulation is limited primarily to government and donor agencies. OPVN has also been publishing monthly bulletins since January, 1988 but again they are only distributed to official agencies.

The GON has not started to broadcast price and stock information. It is understood that there is debate within the government with some strong supporters and some strong opponents. USAID and other donors must insist on the implementation of this condition. It is extremely important to the efficient functioning of grain markets.

Village Level Grain Banks

The ASDG agreement called for a minimum target of 6,000 tons to be stored in village level grain banks by the end of the period. This was to be achieved primarily through the use of groupements mutualistes (GMVs) and cooperatives.

¹⁶ "Joint Program Assessment of the Cereal Market in Niger", Elliot Berg and Associates, December, 1983. Temporal arbitrage tends to reduce seasonal differences in prices through storage and deferred sales while spatial arbitrage tends to reduce price differences to the levels associated with competitive transport and marketing costs.

The interim ASDG evaluation notes that the government announced through the Conseil National de Developpement (CND) that all persons between ages 14 and 60 must contribute ten kilograms of grain to village stocks. A survey carried out by the Ministry of Agriculture in all departments except Agadez found that in the 7,365 villages surveyed the total stock was about 15,953 metric tons. There is some doubt as to the accuracy of this figure, but it is clear that despite inaccuracies the target of 6,000 tons by September, 1989 was well exceeded as early as 1986. There have been a series of good harvests since then and the likelihood is that the stock is even higher now.

The letter of the agreement was honored; the existence of these village grain banks will help tide people over during crises until external assistance can reach them. A second objective of the grain banks program was to organize development of cooperative grain storage efforts. This did not really happen, as the stores were created through government "fiat" rather than voluntary cooperation.

It was recommended in the interim evaluation that future grain banks be based on the initiatives of GMVs and Coops. This will not only provide food security but also increase competition in the grain markets.

2.3.4 Conclusions about Reforms in Grain Marketing

The government has honored most of the contractual commitments made under the ASDG agreement, but there has been no effort to broadcast reports on the grain marketing situation at the arrondissement level. By September, 1989 the broadcast information system was expected to cover 75% of the country's arrondissements. While price information is being collected and printed, it is circulated within a very limited circle of government departments and donors.

There seems to be some opposition to broadcasting information on the grain marketing situation. The opposition most likely stems from a lack of understanding of the importance of such information to the efficient functioning of grain markets. A vigorous attempt must be made to educate the opponents and push through with the broadcasts. The information is collected regularly and can be broadcast easily once the opposition is overcome.

The only other area where problems persist is in the free movement of grain in the country. Police, Gendarmerie, Garde Republicaine, and customs officials hamper the free movement of grain, increasing the cost of grain trade. The GON has to make it clear to law enforcement agencies that grain movements are no longer restricted, and publicize this information. The frequency of checks has been reduced recently as the information filters through to the lowest levels of administration.

Progress in key areas of reform has been very good. The tenders and bid system for grain purchases has finally been successfully implemented and prices decontrolled. The participation of the cooperatives in the grain markets has been less than desirable but this is due more to legal and organizational problems within the cooperative movement than anything else. Reforms of the cooperative system must be a priority in the future, if cooperatives are to play an important role in grain markets.

2.5 Border Trade Development

The development of border trade with Nigeria, the largest economy in Africa, was rightly considered essential by ASDG designers. The grant agreement and its subsequent amendments included among the conditions precedent the improvement of border trade with Nigeria. The liberalization of border trade combined with the sharp fall of the Naira has improved the quality of life of the people living along the border. The effects have also extended further away.

The Nigeria-Niger border is well over a thousand kilometers long. Members of the same family live on both sides of the border and in many cases possess identification papers from both countries. Thus, attempts to control the frontier generally tend to be unsuccessful. Merchants engaged in border trade note that when Nigeria imposes controls on the frontier trade there is very little effect, though when the controls are imposed by Niger they are harder to evade. Nevertheless, the family ties across the border make it hard for any side to control the flow. Recognizing this, along with the benefits to consumers such trade brings, ASDG designers insisted on free border trade as a policy reform measure tied to the grant. The movement to liberalize the border went as planned except for one major interruption when livestock exports were banned by the Niger government to build up the herds following the 1984-85 drought. The ban was subsequently lifted and replaced by quotas late in 1986 and early in 1987. The quotas were removed in 1988. There is some doubt whether the ban was successful in reducing livestock exports significantly, as much of the livestock trade moves through the parallel market. The data in Table 2-6, from the IMF report, show little effect.¹⁷

¹⁷ Table 50, IMF Report SM/88/265, December 5, 1988.

Table 2-6
Evolution of Exports of Cowpeas and Livestock

	1983	1984	1985	1986	1987	1988
	(in billions of FCFA)					
Non Uranium Exports	110.0	98.8	96.3	88.7	86.9	81.4
of which:						
Cowpeas	3.4	3.4	n/a	7.8	0.1	5.9
Livestock	20.0	20.2	11.3	10.3	13.0	13.5
	(in '000 metric tons)					
Cowpeas	21	30	n/a	31.5	1.1	45.3

Source: IMF.

2.5.1 Key Factors Influencing Border Trade

The single most important factor driving the border trade with Nigeria is the CFA/Naira parity. This affects trade flows in a number of ways, some of which would be unexpected at the first glance. The parity to consider is that in the parallel market, and not the official market. Of late, effective devaluation of the official rate has brought the parallel rate very close to the official rate. Table 2-7 illustrates the evolution of the CFA Naira parity in the parallel market at Zinder. This data is from the Michigan Report.¹⁸

<u>Month</u>	<u>Table 2-7</u> <u>CFAs per Naira</u>		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
January	106	75	59
February	104	72	58
March	94	72	56
April	92	71	53
May	86	67	50
June	86	67	48
July	83	67	49
August	79	67	47
September	73	67	45
October	72	67	n.a.
November	72	66	n.a.
December	73	64	n.a.

¹⁸ ASDG Interim Assessment: Agricultural Inputs, Version 2.0, December, 1988.

The Evaluation Team was not able to visit Zinder but did visit Birni Nkoni, another major border trading town. The parallel rate there in late January, 1989 was about 36 CFA per Naira. Nigeria officially devalued the Naira in September, 1986 but that devaluation seemed to have little effect in the parallel market. Data from the Tufts University Livestock Export Study¹⁹ shows the parallel rate at Maradi and there is little difference between Zinder and Maradi. The arbitragers are fairly efficient in the parallel market. Sometimes they travel to Benin to buy Nairas and resell them in the Niger border towns.²⁰

The theory of international trade would predict that as the Naira drops in value, Niger exports to Nigeria should drop and Nigerian exports to Niger should increase. The data in Table 2-6 shows that the former has not happened, although evidently imports from Nigeria have increased. Exports to Nigeria are driven by two factors - surplus in Niger and the demand for Nigerian consumer products. As long as Niger has a surplus of cowpeas and livestock they will be exported to Nigeria as it is the biggest and most easily accessed market for these products. The depreciation of the Naira does not affect Niger exporters as much as would be expected because instead of bringing back cash from Nigeria, they bring back consumer products which they sell in Niger. Thus, as Nigerian consumer products have become cheaper for Nigeriens, the demand for them has increased and consequently, the larger market allows larger volumes to be sold.

The paradox is that depreciation of the Naira increases exports from Niger. This is particularly true for livestock exports because in transhumant/nomadic societies livestock holdings are used as a store of asset. Thus, households have the option of holding and increasing their wealth or selling them and increasing their income. Evidently, imports have increased even faster and the balance of trade on the frontier has deteriorated in favor of Nigeria. The CFA shortage in Benin which has recently precipitated a major political crisis also helps to increase Nigerien imports from Nigeria as Nigeriens can buy Nairas cheaply in terms of CFA in Benin.

¹⁹ Cook, Andry, Seydou Harouna and Mani Yahaya, Politique d'Exportation du Betail du Niger, February, 1988, GON/Tufts University/USAID Integrated Livestock Project, Niamey.

²⁰ Benin is experiencing major shortages of CFAs and therefore a CFA buys relatively more Naira in Benin than in Niger. The Benin-Nigeria border is also characterized by family connections as along the Niger-Nigeria border.

The border trade with Nigeria also provides cotton farmers with a system to acquire cash pending Compagnie Francaise du Developpement des Fibres et Textiles (CFDT) purchases of their cotton. At harvest farmers in urgent need of cash go to Nigeria and sell their cotton. When the provides funds to the Prefects to purchase, these farmers then repurchase cotton in Nigeria and sell to the CFDT. They are thus able to adjust for their short run cash flow problems and meet their quotas. They may also benefit from the price differential.

2.5.2 Cowpeas Export

The main thrust of ASDG policy reform on border trade bears on the promotion of exports of cowpeas and livestock. Looking back at the evolution of cowpeas exports, reproduced in Table 2-6, it is hard to tell whether there has been improvement. Exogenous factors such as (1) closing of Nigerian border, (2) depreciation of the Naira with respect to the FCFA, (3) insect infestation and late seeding of cowpeas, etc. have contributed to muddle the overall picture considerably. The closing of the Nigerian frontier contributes primarily to a drop in official exports of cowpeas. The likelihood is that almost the same amount was exported through non-legal channels. Traders interviewed by the Evaluation Team made it clear that official border closings by Nigeria do little to hamper trade flows, even though Niger closings do affect flows. Even when the border is open a good deal of traffic may pass through unofficial channels just for convenience.

The key determinant of the volume of cowpea exports is supply and demand on the Niger side. The relatively high value of the CFA relative to the Naira means that selling in Niger is profitable. If there is excess of supply over demand in Niger, then the bulk of the surplus would be exported to Nigeria. The growth in demand for cowpeas in Niger can be approximated by the growth in population. Thus, if the production of cowpeas grows faster than the population of Niger, then cowpeas exports will grow, otherwise it will fall. The simple algebraic model below illustrates:

"C" is cowpea production in Niger,
"P" is population in Niger,
and "N" is cowpea consumption per person.

Therefore, Cowpea Exports = C - P x N

Table 2-8 compares cowpea exports figures estimated as above with the official figures. Except for 1986 the estimated export figures far exceed official figures. Furthermore, the official export figures have no relationship to production. In the four year series shown in the table, the lowest official export figures are for 1987, the year with the highest output.

Table 2-8

Simulation of the Growth of Cowpea Exports from Niger

	1985	1986	1987	1988
Cowpea Production ('000 tons)	195	115	293	209
Population of Niger (thousands)	6576	6793	7018	7250
Estimated Consumption in Niger	99	102	105	109
Simulated Exports ('000s tons)	96	13	188	100
Official Export Figures ('000s tons)	N.A.	32	1	50

Notes:

1. Nigeria is the only realistic market for Nigerian cowpeas. Benin has been experiencing major cash shortages and the Mali frontier is far from the main cowpea growing area.
2. Exports to Nigeria are dictated by the demand for Nigerian consumer products which have become more attractive to Nigeriens with the fall in the Naira. This is a paradoxical situation where increase with the depreciation of Naira as discussed in the text.
3. Consumption of cowpeas in Niger at 15 kg/person in Niger.

Sources: Consultant estimates from data in Statistical Annex to IMF Report, Dated December, 1988.

Therefore, the Evaluation Team believes that the simulated figure is closer to actual flows than the official figures.

In keeping with the ASDG agreement, the GON removed controls (SONARA's monopoly) on the export of cowpeas. However, as the export of cowpeas moves primarily through unofficial channels, the main result of the removal of restrictions may be to encourage a greater percentage of the flow to pass through official channels. It should be noted however that the flow through unofficial channels is not only to evade restrictions but also because it is more convenient at times.

2.5.3 Livestock Exports

According to recent IMF sources, there has been an increase in herd size as a consequence of good weather conditions and governmental measures initiated since 1985.²¹ These measures included a ban on the export of female livestock, the improvement of veterinary care, the improved use of pastoral lands and breeding practices, and the formation of pastoral associations. While these measures contributed to the reconstitution of herd size and hence, in one instance, the capacity to export, they appear to be contradictory to the spirit of ASDG (in banning exports of livestock).²² Under these conditions, no direct link can be established a priori between ASDG and the variations in livestock exports.

The various taxes, fees and patents for livestock export mean that it is not profitable to export legally, but at the same time it is highly profitable to export illegally. According to customs officers, hardly 10% of the exports pass through official channels. This was verified by looking at the overall stock size, comparing biological growth rates and official export figures in a study.²³

²¹ IMF Enhanced Structural Adjustment Arrangement, December 1988.

²² It must be noted that transhumant populations relocated south of the border during the drought and moved north later. This would have helped to reconstitute herd size.

²³ See Cook, et al. This study by the USAID funded integrated livestock project indicates that almost 90% of livestock exports moved through non-official channels for various reasons.

The algebraic formulation for this is simple. H is herd size in year "t", H' the herd size in year (t+1), and "r" the biological rate of growth. X is the volume officially exported. The number unofficially exported, X', during that year is given by the following relationship:

$$X' = H*(1+r) - H' - X$$

The study cited above used this relationship to examine whether official export figures were accurate. They found that the official figures were far from accurate. Of course, estimating exact volumes from the above formula requires a great deal of faith in the official figures for livestock holdings.²⁴

Actual exports are many times greater than the official figures, and this factor rises during periods of official export bans. The livestock export study compared the relative profitability of official and unofficial exports and found the heavy bureaucratic controls, fees, and taxes make exporting through official channels highly costly. Table 2-9 reproduces data from that study. Excluding the costs of transport and the price of the head of cattle, the cost of exporting a head through illegal channels is 915 CFA which includes the losses resulting from being caught. Exporting through official channels, excluding the price of the cattle and cost of transport, the costs range 55,750 Francs CFA per head for an exporter who exports only ten a year to 14,497 Francs CFA per head for those exporting a thousand a year. The higher costs for smaller exporters are because fixed charges have to spread over fewer heads of cattle. These direct costs do not impute any cost to the time-consuming process required to fulfill the necessary formalities. Consequently, most exporters, particularly smaller exporters, will tend to use illegal channels particularly when the risk of getting caught is so low. The implication is that the exports from livestock are worth much more to Nigerien economy than the official figures indicate.

Livestock exporters have a choice of markets, but the biggest and most accessible is Nigeria. Livestock is not only a commodity, it is also a way to accumulate wealth in rural communities. Thus, livestock exports are not only governed by supply but also by the need to acquire consumption goods, whether for sale or consumption. When there is a surplus, it is not evident that the balance will be exported. The household may hold on to the excess as a form of saving. Only if there is a need to acquire consumption goods will the export take place.

²⁴ Estimation is still a valid exercise if it can be assumed that proportion of under-count or over-count does not vary from year to year, which seems to be a fairly safe assumption.

Table 2-9

Costs per Head of Cattle Exports through Official and Unofficial Channels
Francs CFA^s per Year

Category of Costs	Exports through Official Channels Number of Cattle Exported per Year			Unofficial Channels Any Number per Year
	1000	100	10	
Cost of Cattle	85,000	85,000	85,000	85,000
Fixed Costs				
-Export Permit "1"	4,800	4,800	24,000	
-Export Permit "2"	3,900	3,900	19,500	
-Chamber of Commerce Fees	50	500	5,000	
-License	147	368	1,470	
Export Tax	5,600	5,600	5,600	
Transport Charges	200	200	200	200
Average Costs for illegal export (if caught)				915
Total Costs	99,697	100,368	140,770	86,115
Total Administrative Charges and Taxes	14,497	15,168	55,570	0

Notes:

1. Permits are assumed to be issued for blocks of 50 cattle.

Source: Andry Cook, Seydou Harouna and Mani Yahaya, "Politique d'Exportation du Betail du Niger", February, 1988.

2.5.4 Imports

Besides the focus on exports, ASDG policy reforms also aim at increasing rural incomes. To the extent that rural propensity to import is not negligible, rural income improvement would generate incremental imports. At present, since one does not know by how much the policy reforms have improved rural incomes, it would be hard to put one's finger on the policy reform induced increase in import demand. The level of imports have of course increased over the period, for reasons discussed in Section 2.5.1. It is hard to know how much of the increase can be attributed to the ASDG Policy Reform Component.

2.5.5 The Impact of Increased Border Trade

As noted earlier, the GON actually violated the grant agreement by banning livestock exports following the drought of 1984-85. The ban was meant to build up herds. The effectiveness of the ban is very much in doubt, as livestock exports to Nigeria pass mostly through unofficial channels. The government has made little progress in reforming the lengthy procedures that are required for exporting. These proliferate at all levels of the administration. There have been some attempts to centralize. The lack of reforms have not really affected the flow of trade. All it has done is to keep trade out of official channels and effectively reduce government revenues since illegal traders do not pay tax. Removing restrictions and reducing taxes can also help to increase revenues as more trade will pass through official channels. It should be noted that USAID-Niamey is continuing its efforts to reduce these trade barriers under the Niger Economic Policy Reform Program (EPRP).

The exports to Nigeria of Niger agricultural products are driven mostly by local production and the demand for Nigerian products.²⁵ The good rainfall of recent years helped increase agricultural production in Niger, and the falling value of the Naira stimulated demand for Nigerian consumer goods. The combination of these two factors have driven Niger exports up. It is, however, likely that imports increased faster than exports.

ASDG policy reform contributed to the increased trade both directly and indirectly. The direct contribution came from the removal of the ban on cowpea exports. The indirect contributions resulted when the government did not respond to the sharp rise in imports from Nigeria and the worsening trade deficit with Nigeria by clamping down with import controls, which would have also tended to reduce exports. The Niger consumer has benefited from the increased trade. Imports of cheap consumer goods from Nigeria

²⁵ Exports increase to acquire Naira for Nigerian products.

have kept prices down. The African consumer price index fell from 520 to 479 (i.e almost 10%) between 1985 and 1988 while European consumption price index fell from 424 to 393 over the same period.²⁶ During the same period, total credit in the economy rose from 91 billion Francs CFA to 106 billion Francs CFA. Without the dampening effect of cheap imports, this expansion in credit would have driven up prices.

The African consumer price index for Niamey is composed of four components. Food and Beverages declined from 586 in 1984 (it was 535 in 1983, the last full pre-drought year) to 484 in 1988; clothing increased from 388 to 417; housing rose from 523 to 685 and other products declined from 407 to 394. The components that rose were housing, which is not a tradeable item, and clothing, which is partly locally manufactured. Housing, which is completely unaffected by trade, showed the sharpest rise. A study by the University of Michigan team notes that a substantial supply of millet in the Niamey market comes from Nigeria. As food and beverages represent 59% of the budget, it is clear that a great proportion of the consumer products are coming in from Nigeria as well. The lower priced Nigerian goods have kept the overall price index down. The sharpest rise was registered by that part of the index that is unaffected by trade with Nigeria.

It has been argued that since imports increased faster than exports, there were no benefits to Niger from increased border trade. If one takes a mercantilist view of trade then that is true. However, most economic analysts see trade as a way to improve consumer welfare. When prices fall, real incomes increase and therefore consumer welfare is enhanced. Taking a welfare view of the impact of border trade rather than a pre-Adam Smith mercantilist view, it is easy to conclude that increased border trade has benefited Niger.

2.6 Rural Credit

The log-frame for the ASDG program required that a study be carried out of the rural finance situation in Niger, and that appropriate policy reforms be developed. These reforms were then to be taken up with the government for implementation.

The issue of rural credit in Niger has been studied and recommendations for reform developed in the Ohio State University

²⁶ There are two consumer price indices for Niger: the African CPI is based on African consumption patterns; the European CPI is based on the consumption patterns of Europeans and other expatriates in Niamey.

Report.²⁷ The key findings of the report include that the existing banking system poorly serves rural Niger. The government developed Caisse National de Credit Agricole (CNCA) to provide credit to rural areas. However, the CNCA quickly became a system of pre-financing the credit components of projects run by various parastatals, particularly the Centrale d'Approvisionnement (CA). It became an administrative conduit to channel funds from the government and various donors to projects such as promoting the adoption of new inputs. It became subservient to the borrowers needs and never was allowed to develop into a full fledged financial intermediary. Furthermore, it was separated from the final users of the credit by its borrowers such as the UNC (Union Nationale des Cooperatives), who on-lent the funds to various end users. Thus, even if allowed to, CNCA could not monitor the performance of the final borrowers because they were separated from them by intermediary parastatals and various development projects. The latter organizations lacked the ability and resources to carry out such loan monitoring. The financial viability of the institution was never a priority and it required continual infusions of funds to subsidize the high operating costs (13.22% of the lending volume) as well as replenish resources depleted by the high incidence of delinquent loans.²⁸

There is was at the same time a dynamic and viable non-formal financial sector operating in rural Niger. The network includes wholesale and retail merchants, as well as money keepers and 'tontines'.²⁹ Aggregate life cycle liquidity for 56 tontines surveyed by OSU amounted to 27.2 million Francs CFA (about \$88,000). The survey also included 56 money-keepers. Aggregate deposits for the group as a whole ranged from 13 million Francs CFA in the dry season to 30 million Francs at the height of the post-harvest season. The survey also found that 78% of the money-

²⁷ Rural Finance in Niger: A Critical Appraisal and Recommendations for Change, Report submitted by Ohio State University to the USAID Mission, Niamey, Niger, February, 1987.

²⁸ According to the OSU study, among short-term loans to coops in 1984-85 almost 100% could be considered doubtful loans, up from 5.2% in 1983-84. For short-term loans to individuals, the proportion of doubtful loans rose from 37% in 1983-84 to 49% in 1984-85. The situation was slightly better for medium-term loans.

²⁹ Tontines are a system of mutual savings groups which use peer pressure to generate savings. When the savings builds up to a certain point, each member of the tontine, in turn, gets to use the money.

keepers offered loans with an average value of 54,784 CFA (about \$180), and a high loan value of almost 500,000 Francs CFA (about \$ 1,600). The key finding of the study of the informal sector is the high level of liquidity in rural Niger.

The recommendations of the Ohio State study were as follows:

- Abolish the CNCA.
- Maintain the credit lines to various agriculture development projects directly through the projects rather than channelling them through the CNCA.
- Promote Village Level Savings and Credit Cooperatives (i.e. Credit Unions).

The Government of Niger (GON) has abolished the CNCA. GON and USAID have reached agreement in principle on developing a credit union system. A formal strategy to initiate a grass-roots based credit union movement in Niger was developed by the World Council of Credit Unions (WOCCU).³⁰ The Government of Niger has agreed to work with WOCCU to create the appropriate legal framework for the functioning of credit unions. The details of the charter are to be worked out. As an intermediate step, the government has created a special status under the cooperative act so that the credit unions may start to operate until the credit union charter is finalized.

The findings of the OSU study indicate that the credit union movement should be able to tap a large pool of funds in rural Niger. It should be noted however that while this will certainly increase the pool of rural savings and formalize it, it may not increase credit for agriculture. Rural people know how risky agriculture is and may direct the credit-union management committee to avoid agriculture loans. Nevertheless, if there is credit available for rural input supply businesses, some of these funds will find their way into the agriculture sector in the form of supplier credits. The credit unions would be likely to provide capital to new entrants into the business, increasing competition and benefiting the community at large.

2.7 The Impact of Policy Reforms

2.7.1 Impact on Macroeconomic Variables

³⁰ A Proposal to Develop a Credit Union System in Niger, World Council of Credit Unions, Madison, Wisconsin, March, 1988.

Impact on the Budget Deficit

The macroeconomic impact of the policy reforms can be examined in several areas. These include the budget deficit, Gross National Product, efficiency of the overall economy, and the balance of trade.³¹ As will be discussed in the next chapter, it is very difficult to separate the effects of the policy reform from the other components.

The easiest component to understand is savings in government expenditures. The biggest come from savings at Centrale d'Approvisionnement (CA) and the Office des Produits Vivriers du Niger (OPVN). The Evaluation Team was able to obtain the CA's annual reports over the last few years. Based on those reports, the estimates shown in Table 2-10 were developed. By 1986-87, the savings at the CA for that year alone were over one billion Francs CFA. The cumulative savings up to 1987 were close to 1.8 billion Francs CFA (or almost \$ 6 million). Annual savings will be even greater in the future. These savings are derived assuming that the CA sales and subsidies remain at their pre-ASDG level.³²

The financial reports of the OPVN have not been officially released for the period from 1984, with the exception of the 1986-87 report, the year in which OPVN first lost its monopoly. Examining that report in discussions with OPVN financial staff, the Evaluation Team was able to construct some estimates of the potential savings at OPVN following the policy reforms. The estimates include three components: finance charges incurred to pay for the grain marketing operations, savings in personnel, and savings of other direct operating costs. The savings in finance charges amount to between 500 million to 700 million Francs CFA per year, while the savings in the other two categories are in the neighborhood of 200 millions Francs CFA each. Thus, the total estimated OPVN savings are in the region of one billion Francs CFA per year.

The impact of the policy reforms on the revenue side is less clear. Reductions in export taxes, import tariffs and trade

³¹ Reflected by improvements in the incremental capital output ratio or ICOR.

³² CA sales have, of course, dropped as subsidies have been reduced and the private sector has entered the market.

Table 2-10

Estimate of Notional Savings in the Budget due to Policy Reform
Centrale D'Approvisionnement

Item	'81-82	'82-83	'83-84	'84-85	'85-86	'86-87
Actual Costs						
Cost of Agriculture Equipment	1,044	410	312	62	112	191
Cost of Fertilizers	3,621	1,472	1,774	1,972	1,637	1,204
Cost of Pesticides	N.A.	N.A.	83	61	121	124
Cost of Fungicides	82	83	118	60	48	50
Operating Costs	425	528	511	443	440	295
Sub-Total	5,173	2,494	2,797	2,599	2,357	1,774
Notional Costs Without Reforms after 1984						
Cost of Agriculture Equipment				324	337	343
Cost of Fertilizers				1,741	1,709	1,676
Cost of Fungicides				126	127	127
Cost of Pesticides				98	104	104
Operating Costs				554	548	530
Sub-Total				2,843	2,825	2,781
Actual Revenues	1,348	610	766	571	603	494
Notional Revenues				788	802	817
Operating Deficit						
Actual	(3,825)	(2,494)	(2,797)	(1,811)	(1,555)	(957)
Notional				(2,055)	(2,023)	(1,764)
Budget Saving due to Reform				244	468	1,007
Subsidy from FNI (3)	600	300	550	389	209	0
Value of Donor Contributed Free Fertilizer				1,939	1,636	1,203
Average Subsidy Rate	74%	76%	73%	78%	74%	72%
Net Inflows less Outflows	(3,225)	(2,194)	(2,247)	516	290	246

Notes:

1. Actual costs from reports by the Centrale d' Approvisionnement
2. Notional costs estimated using pre-reform sales volume. Fertilizer is valued at international prices Cif Miami
3. FNI is National Investment Fund/Fond National des Investissements
4. Notional Savings using pre-reform sales volume : notional cost minus notional revenue

Source: Consultant estimates based on CA Reports

controls means that more border trade will flow through official channels.³³ This will most likely increase government revenues despite lowered rates. Progress in this area is still to be made. There is some opposition to this, as many find it hard to believe that lowered tax rates could actually increase revenues. Any increases in production induced by the ASDG reforms would also generate revenues.

Nevertheless, excluding the revenue side, ASDG reforms have already contributed to a substantial reduction in the budget deficit. The Evaluation Team estimates this to be at least 2.8 billion Francs CFA in fiscal year 1986-87, and rising. The data for 1987-88 is not yet complete, but the likelihood is that savings will far exceed 3 billion Francs CFA that year. Thus, the cumulative value of savings between 1985 and 1989 could be approximately 7 billion Francs CFA or more. These savings are permanent unless the policy reform is reversed.

Impact on Gross Domestic Product

The impact on gross domestic product of the policy reforms would occur through two separate channels. The first, and more important one, is a long term effect. The efficiency of the economy will be increased through removal of distortions. The effect of this will be in the long run to decrease the Incremental Capital Output Ratio (ICOR), i.e. less capital will be required to induce a given increase in the GDP. The ICOR for Niger is computed and discussed in the next chapter. Over the 1976-83 period the ICOR for Niger is estimated to be 8.2. This means that for 8.2 Francs CFA of increase in investment, there will be 1 Franc CFA increase in GDP. Improved efficiency of the economy will tend to reduce the ICOR.

The lowest ICOR in Africa is in Mauritius (between 5 and 6) which is one of the most dynamic economies among the OAU member countries. This can be taken as the lower bound which the Nigerien economy can attain eventually. In the short-run, the ICOR is probably going to remain around 8.2. The long run impact of the policy reform would indeed be to lower it, but it is too early to tell.

The other source of impact on the GDP of the ASDG Policy Reform package would occur through the reductions in the budget deficit. The notional estimates of the three billion Francs CFA saved at the CA and OPVN could conceivably increase the investment budget by that amount. If that is so, the additional investments would increase GDP by 250 million Francs CFA annually. Over the 1985-89 period, the notional savings of seven

³³ In the case of official exports to Nigeria, they will be able to earn convertible Naira.

billion or so if invested would have increased GDP by well over 600 million CFA Francs annually, i.e. roughly equivalent to a 100 Francs CFA increase in GDP per capita. The savings are likely to be permanent unless the policy reform package is reversed. As long as the budget savings are invested, the policy reform package could allow per capita income to grow by 30 to 40 Francs CFA per year in the future. This growth does not take into consideration the efficiency effect of the policy reforms.

Imports and Exports

The liberalizing of border trade with Nigeria has contributed to increases in both exports and imports. Imports are likely to have increased faster in view of the depreciating Naira. At the same time, as the policy reforms induced increases in incomes as discussed in Section 2.7.2, additional imports would have been induced. These imports have increased consumer welfare and have helped to bring down the African Consumer Price Index, though how much of this decrease is attributable to Nigerian imports is difficult to estimate.

Reforms in the agriculture input market have lead to an increase in imports of agriculture inputs from Nigeria. In so far as the unofficial imports are generally paid for with commodity exports, this has resulted in an increase in exports as well.

Impact on Income Distribution

The key social indicators to be examined are equity and income distribution, as well as the position of various disadvantaged groups in the society. The improvement of border trade has, of course, improved consumer welfare across the board, but the impact is more likely to be felt by the poorer segments as they are more likely to use Nigerian consumer products. Furthermore, access to the Nigerian market provides Niger cotton farmers with a way to solve their cash flow problems pending CFTD purchases of their cotton.

The removal of subsidies on agriculture inputs would at first glance seem to have hurt poor farmers. However, a closer look reveals that is not necessarily true. The poorest farmers in the country are those growing millet, sorghum, and cowpeas. The data in Table 2-5 show that these farmers use very few purchased inputs, so the impact on them is minimal. Rice and cotton farmers use more purchased inputs, so they would have been affected. But the government has continued to support prices for these farmers with the encouragement and support of some donors. Finally, any reduction in the subsidy on inputs sold by the CA has been compensated by the cheaper Nigerian inputs supplied by the private sector which is now free to engage in the agriculture inputs trade.

OPVN was historically supposed to protect producers by supporting prices when they fell "too low" and to protect consumers by selling when the prices rose too high. The latter role has been preserved, as OPVN still manages the National Food Reserve and handles food aid. Its price support role has been diminished. However, it may be argued that OPVN was never very successful in its producer price support role. It usually bought too late and by then most small-holders had to sell their surplus to traders. Effectively, the OPVN purchases helped traders as well as wealthier farmers and did nothing to promote equity. Quite the reverse, it took resources from the country at large and transferred them to wealthier sections of the rural communities. Farmers are now protected to some extent by the cooperative grain banks, to which they can sell at a reasonable price at harvest when prices are low, and from which they can buy at a reasonable price in the low season when prices are high. This shields smaller producers and rural consumers from much of the effect of seasonal fluctuations.

The impact of the policy reforms has not worsened income distribution, and may actually have improved it. Poorer members of the village communities are protected by the grain banks.

2.7.2 Quantitative Measures to Assess the Impact of Individual Policy Reforms

The lack of a consistent data collection effort by the TA team made it impossible to measure the impact of individual reforms. The nature of data which should have been collected are discussed in Appendix A. To summarize those recommendations we note that at the very least, the TA team should have started monitoring a selected panel of households drawn from different urban and rural strata of Niger. This sample does not have to be a statistically valid sample, but would be to provide operationally valid indicators.

This sample should have been monitored for key variables such as use and source of inputs, the impact of removing OPVN's price stabilization role, the removal of CNCA credit facilities, and the impact of increased border trade. In addition to the household panel, a panel of businesses should also have been monitored for the impact of the policy reforms.

Both of the above samples should be treated as case studies rather than a questionnaire approach. The case study approach has a clear advantage over a questionnaire approach in that initial

responses can be followed up to examine the underlying basis.³⁴ The data collected from a case study approach is less amenable to standard statistical analysis. Nevertheless, the case study approach has a good track record in providing operationally valid indicators even if it does not lend itself to providing statistically significant results. Its biggest advantage is that it is quicker and cheaper.

2.8 Conclusions and Recommendations

The policy reform component of ASDG was well thought out and has been mostly implemented with minor exceptions. The analysis in this Chapter makes it clear that the effects of these reforms are mostly positive. They not only removed barriers to the efficient functioning of the market but also stimulated the economy. Increased border trade with Nigeria has contributed to a reduction in the African price index (see Section 2.5.5).

The removal of subsidies on inputs should contribute to a more efficient allocation of resources. It is unfortunate that rice and cotton production are still being subsidized through contributions by some donors. This is being done, ostensibly, to diversify Niger's agriculture base. It is true that diversification has historically been the most successful road to stable growth in agriculture. The question that needs to be asked is whether diversification through subsidies is economically optimal. The lands that are used for rice and cotton are irrigated lands. Farmers on these lands may have a wider range of options than farmers on rainfed areas. By providing incentives to produce inefficient crops on the very areas of Niger amenable to a wide variety of crop production seems to be highly distorting policy. It is possible that rice and cotton may still be the best crops to grow in those areas but as long as the subsidies remain there is little possibility of finding out.

One reform that has not been undertaken and is extremely important to the proper functioning of a market economy is the dispersal of price information. The GON has started to gather this information but has only circulated it among a limited

³⁴ The Consultant carried out case studies of eighty businesses in the Caribbean. In the beginning it seemed a lot of them complained about lack of financial resources. However, follow up questions revealed that whenever they had had sound business ideas/expansion plans they had had no trouble securing credit from commercial banks. Apart from the fact that, globally, money is a scarce resource, there seemed to be little lack of funding for established businesses if they had good projects. Venture capital for new businesses is of course another matter.

circle of government departments and donors. This information is extremely important for farmers, coops and smaller traders. Larger traders secure information through their own channels giving them an advantage in marketing. By broadcasting the price information, it could be made accessible to smaller traders, coops and farmers giving them access to same advantages that larger traders now enjoy. It is difficult to see why this has not yet been done.

ASDG has helped launch a series of important reforms. The next stage must involve attempts to institutionalize these reforms so that they may become deep-rooted in Niger. The GON has shown tremendous goodwill and sincerity in the implementation of the reforms. The fruits of this must be made permanent.

CHAPTER THREE: MACROECONOMIC IMPACT OF ASDG

3.1 ASDG Original Design Assumptions

As described in Chapter 1, the ASDG sector assistance program includes a total of \$44,015,000 of which \$3,207,000 was for Technical Assistance, \$722,000 for policy studies and workshops, \$38,000 for in-service training and support and \$233,000 for audit and evaluation. ASDG was expected to affect the economy through an increase in foreign exchange availability and in budgetary resources. The policy reforms component will contribute to the overall structural adjustment effort in Niger. ASDG aims at assisting the Government of Niger (GON) in:

- reducing the GON budget burden (through policy reform in input subsidies and grain marketing);
- promoting a more efficient resource utilization and allocation within the agricultural sector. through cooperative/private sector involvement;
- maintaining existing investment activities and raising the level of the agricultural absorptive capacity;
- financing essential imports without further deterioration in the BOP; and
- increasing agricultural production through more inputs to farmers, more private sector participation, and increased effectiveness of projects in the agricultural sector.

With regard to the intended objectives, the original design of ASDG is, in its outlines, appropriate. Increased foreign exchange availability allows for the import of essential goods, without a further worsening the BOP deficit (and without violation of the IMF agreement). To the extent that the local currency counterpart funds are used to finance on-going and new investment projects in the agricultural sector, they contribute effectively to maintaining investment activities in this sector.

On the other hand, the ASDG induced policy reforms aim at promoting a market-oriented environment in the agricultural sector, with more participation from the private sector. To the extent that these reforms are successfully implemented, they would contribute effectively to a more efficient utilization and allocation of agricultural resources, since the latter would move freely to the most productive uses in an environment free of (state-imposed) distortions. In theory, less distortion leads to more production and income.

Deficiencies may however arise during the implementation stage. Hence, the primary concern is to review the actual implementation in counterpart fund use and policy reforms. Concerning policy reforms, the issue is to verify whether the spirit of the reform has been respected along with the formal fulfillment of scheduled condition precedents. The implementation process of the various policy reforms which were conditions for ASDG was analyzed in detail in Chapter 2.

With respect to counterpart funds, the main issue is to ensure that projects are financed only if they can be justified on grounds of economic viability. Otherwise, the maintenance and/or promotion of "white elephant" investment activities will not contribute to increasing the sectoral absorptive capacity, and will not have any positive effect on long-term economic growth. The uses of Counterpart funds will be analyzed in Chapter 4.

The present chapter deals with the need to identify and, to the extent possible, quantify the impact of the ASDG package, as implemented. The chapter is organized into nine sections. Following this introductory section, Section 3.2 will address the conceptual issues in evaluating the macroeconomic impact of ASDG. Sections 3.3 to 3.6 will in turn deal with the effects of the ASDG program on Gross Investment, GDP, BOP and Public Finance. Section 3.7 will discuss ASDG impact on the Logical Framework indicators. In Section 3.8, we will review the IMF/IBRD policy reform initiatives and identify program complementarities or divergences with the purposes and objectives of ASDG. Recommendations for future actions will be listed in Section 3.9.

3.2 Conceptual Issues

Given the effects of coincidental and "exogenous" factors (IBRD SAL Program, IMF SAF, variations in the exchange rate, depreciation in the terms of trade, weather conditions, etc.) on the Nigerien economy, the overall approach in assessing ASDG impact cannot be based on a simple before/after comparison of key indicators.

To carry out the assessment exercise, it would be desirable to single out the effects of ASDG policy changes on the economic variable considered, holding all other things constant. This approach can be best implemented through economic models, quite amenable to the concept of "partial differentiation". Through model design and simulation, it would be possible to track down unequivocally the effects of ASDG on major macroeconomic variables.

The proposed approach is not without limitations. First, successful model implementation would depend on the availability of reliable data. Second, it is not always possible to model the

"dynamics" of the economic variable or system under consideration. In consequence, the analysis is simply spelled out in terms of "comparative statics". While it would be difficult to project the evolution of an economic variable undergoing structural changes, it is relatively easier to identify the policy-induced change in the value of a variable, holding all other things constant.

It should also be noted at the outset that for analytical rigor and clarity, the macroeconomic impact of each main component of the ASDG package will be assessed separately. The effects of the ASDG transfer of funds will be, whenever possible, differentiated from those induced by the set of policy reforms.

ASDG funds were disbursed over a period of four years, from 1985 to 1988. In its analysis, the Team will estimate the global impact of ASDG over the four year time span considered as a whole. Due to the existence of lags, it would not be reasonable to push the dubious accuracy in identifying the impact of ASDG components on a year by year basis.

Finally, to the extent that the published and available data refer only to the "formal" sector, the present analysis does not claim to give a full description of both "informal" and "formal" sectors in the Nigerian economy.

3.3 Impact on Gross Investment

Gross Investment, defined as the sum of fixed investment and change in stocks, is considered a source of economic growth. Hence it is important to look at the ASDG contribution to the Nigerian investment effort.

Table 3-1
Gross Investment as Percent of GDP
(in current FCFA billions)

	1983	1984	1985	1986	1987	1988 1/
GDP (mkt prices)	687.2	638.5	647.0	643.4	649.9	714.2
Gross Investment	74.0	20.3	82.4	61.1	60.1	70.1
	(in % of GDP at market prices)					
Cross Investment	10.8	3.2	12.7	9.5	9.2	9.8

1/ Preliminary estimates.

Source: IMF Recent Economic Developments, July 1987.

IMF Enhanced Structural Adjustment Arrangement, Dec 1988.

Table 3-1 points to some stability in the share of investment with respect to GDP since 1986. Can this be attributed

to the ASDG package ? In the following paragraphs, we will attempt to identify the investment impact of the ASDG package, considered first as a transfer of funds, then as a set of policy reforms.

3.3.1 Impact of ASDG Transfer of Funds on Investment Level

At the close of 1988, disbursements through the ASDG Local Currency Counterpart Fund amounted to a cumulative FCFA 11.8 billion. Out of this amount, an estimated FCFA 10 billion was spent, and served effectively to finance part of the public investment over the 1985-88 four-year period.

The analysis of Local Counterpart Fund use (Chapter 4) reveals that some part of the FCFA 10 billion contributes to the financing of new investment projects, with the remaining share channelled to on-going projects. However, given the constrained budgetary situation, it is our opinion that the on-going projects would have been cancelled due to lack of financing, without the ASDG funding. Hence the fully "incremental" impact of ASDG funding on the GON level of capital spending can be seen.

During the 1985-88 period, investment activities carried out by both the private and public sectors totalled FCFA 273 billion. The "incremental" nature of ASDG funds implies simply that this level would have been cut by FCFA 10 billion (i.e. by about 4%), without ASDG.

In light of the previous argument, ASDG funding does have a positive effect in "maintaining investment activities" in Niger. However, it should be noted that this, in itself, matters less than the necessity to finance economically sound investment activities. As will be made clear in Chapter 4, there is actually a deficiency at the level of project analysis, and ASDG funds may not always be put to their best uses.

3.3.2 Impact of ASDG Policy Reform on Investment Level

The ASDG policy reforms focussed on the reorganization of input delivery system, input subsidies and pricing; cereals marketing and pricing; cross border trade; rural financial markets; and cooperatives and the private sector.

While the ASDG-induced reduction in government expenditures (totalling almost 2.8 billion Francs CFA during fiscal year 1986-87, as explained in Chapter 2)³⁵ contributed to alleviating the

³⁵ Savings at the CA total approximately 1.1 billion FCFA during fiscal year 1986-87 and is expected to rise during future fiscal years. The cumulative savings at the CA during 1984-87

GON budget deficit, it is difficult to know whether these "savings" actually went to support the public investment program.

It is furthermore true that rural financial markets would promote rural savings, hence the possibility to increase private investment activities. However, efforts to promote rural financial markets are, at this time, only at the inception stage.

There are also some indications of increased private capital spending which can be linked to ASDG policy reforms.

3.4 Impact on Gross Domestic Product

As evidenced by Table 3-2, the evolution of GDP does not follow any noticeable trend over the past years. A priori, it would be hard to claim the positive growth rates in 1985, 1986 and 1988, as the sole fruits of ASDG program, regardless of the overall weather conditions prevailing in these years.

Table 3-2
Annual Percentage Changes in GDP

	1984	1985	1986	1987	1988 1/
GDP growth rate (in real terms)	-16.8	7.8	3.8	-0.7	7.1

1/ Preliminary estimate.

Source: IMF.

To assess the impact of ASDG on GDP, we need a more elaborate methodological framework which would allow differentiation between the immediate and long-term effects of each of the two ASDG components (transfer of funds and policy reform). The following paragraphs will provide a discussion on the proposed methodology, the issue of implementation and the interpretation of results obtained.

3.4.1 Impact of ASDG Transfer of Funds on GDP

It was previously suggested that without ASDG funding, the investment level in Niger would have been reduced. Such a

was almost 2 billion FCFA and is expected to total well over 4 billion FCFA during the 1984-89 period. OPVN savings are approximately 1 billion FCFA per year. Thus, the total savings during 1984-89 is expected to be over 7 billion.

decrease would have negative effects on the GDP. Two kinds of effect can be envisioned: the immediate and the long-term effects.

Immediate Effects: The immediate "expenditures" effects of a reduction in investment spending can be tracked down through the linkages of an input-output model. A decrease in investment spending would have negative effects on (1) the "intermediate" consumption of all sectors of the economy, and (2) the level of "final" consumption. Intermediate consumption refers to the demand for raw materials, equipment, etc. generated by the initial investment. Final consumption refers to the demand for goods which is induced by incomes (salaries, profits) coming from the incremental production of raw materials, equipment, etc. generated by the initial investment. The sum of changes in intermediate and final consumptions is equal to the change in "total demand".

Based on previous work carried out by the Direction d'Evaluation et de la Programmation des Projets (DEPP), Ministry of Planning,³⁶ it can be claimed that for each FCFA invested in the rural sector in Niger, an increment of FCFA 2.5 in total demand (i.e. in intermediate and final consumptions) will be generated. Since demand equals production, the latter will increase by the same amount. Out of this, only 38% represents the share of value added (i.e. GDP) in the production process. In other terms, each FCFA worth of investment generates an incremental GDP amounting to FCFA 0.95.

Through expenditures linkages, ASDG transfer of funds (FCFA 10 billion) have increased GDP by FCFA 9.5 billion over the 1985-88 period. The previous result needs to be interpreted with some caution though, since the methodology followed is based on a set of input-output coefficients estimated in 1981, which need to be updated.

Productive Effects: To estimate the "productive" effects of investment on GDP, a "short cut" approach was applied, achieved

³⁶ Evaluation de l'Impact Immédiat des Investissements Publics dans le Secteur Développement Rural au Niger" by J. Metzger, June 1987. Starting with the 1987-89 Investment Program in the Rural Sector (FCFA 133 billion), planned investments are broken down into several cost categories (inputs, operating costs, personnel, etc.) relative to each sub-sector (agriculture, livestock, forestry, micro-realization, hydraulique, etc.). The different cost categories are then "mapped" into the input-output sectoral divisions (i.e. establish a correspondence between cost categories and the input-output sectors). From these variations in investment expenditures (by category of cost/sector), changes in the level of demand, production, income, etc. can be derived.

by computing Incremental Capital Output Ratios (ICOR) based on historical series of GDP and Gross Investment.

The ICOR shows the amount of capital (investment) needed to produce one unit of GDP, over a fixed period of time. In the case of Niger, over the 1985-88 period, investment in real terms totalled 161 billion Francs CFA (see Table 3-3 below). Over the same period, GDP increased, in real terms, by 61 billion Francs CFA. On the average, it has thus been necessary to invest 2.6 Francs CFA in order to get one Franc CFA worth of increase in the GDP level.

Table 3-3
Computation of ICOR (1985-88)
(in current FCFA billions)

	1983	1984	1985	1986	1987	1988
GDP at factor costs	662	612	622	619	629	692
Invest. Fixed	86	63	64	59	63	80
(in constant FCFA billions)						
GDP at factor costs	662	551	594	616	612	655
Invest. Fixed	86	59	57	51	53	65
Variation in GDP			655 - 594	=	61	
Cumulative investment			57 + 51 + 53	=	161	
ICOR (1985-88)			161/61 = 2.6			

Source: IMF.

Deflated by Investment Deflator 7% per year decreasing to 3% in the outer years.

ICOR values are quite sensitive to the time period retained for the computations. The low ICOR value of 2.6 relates to a relatively short period of economic recovery, favored by relatively clement climatic conditions. It may not be fully representative of the true local environment in the long run. Due to these qualifications, it was decided to compute ICOR values over a longer time span. Thus, over the 1976-83 period, the ICOR in Niger was estimated at 8.2 (see Table 3-4). The period chosen includes the uranium led growth phase (1976-80), and the stagnation phase (1981-83). The ICOR value computed over this time horizon can be considered characteristic of the Nigerian structure of production in its pre-adjustment days.

Table 3-4
Computation of ICOR (1976-83)
(in current FCFA billions)

	1976	77	78	79	80	81	82	83
GDP at factor costs	231	275	346	423	499	569	622	652
Invest. Fixed	40	62	88	123	152	138	111	98
(in constant FCFA billions)								
GDP at factor costs	231	239	259	294	309	312	311	298
Invest. Fixed	40	59	80	98	112	94	71	58
Variation in GDP	298 - 231		=		67			
Cumulative investment	40+59+80+98+102+94+71				= 553			
ICOR (1976-83)	553/67 = 8.2							

Source: Series from PAAD Statistical Appendices, not compatible with IMF series reproduced in Table 3-3 above.
Deflated by Investment deflator. (See Appendix II).

In the literature survey, ICORs in the range of 6 to 10 have been frequently estimated for developing countries. For comparative purposes, recent estimates for long-run ICOR ratios in some developing countries undergoing structural adjustment are reproduced in Table 3-5.

Table 3-5
Estimates of ICORs in some LDCs

Countries	Estimates	Time period considered
Mauritius	5-6	mid 80s
Burundi	7-8	mid 80s
Madagascar	10-11	early 80s

Source: Madagascar: Economic Parameters Study (I.B.R.D. 1986).
Mauritius: Structural Adjustment Loan President's Report (I.B.R.D. 1987). Burundi: Structural Adjustment President's Report (I.B.R.D. 1988).

In relation to other countries, an ICOR value in Niger of 8.2 seems to be high, but still falls within the plausible

range.³⁷ This is not so for the lower value of 2.6. Such a level of efficiency in investment is quite uncommon to developing countries.³⁸ If anything, this figures underlies a short-term trend, computed over a three year period, which may not reach far into the future. In the following analysis, however, both ICOR estimates will be used to delineate a range of extreme values within which the true ICOR can be found.

We argued previously that, without ASDG funds, the level of investment would have decreased by FCFA 10 billion. With an ICOR equal to 8.2, this implies that GDP would have dropped by about FCFA 1.2 billion. This result holds, under the restrictive assumption that the structure and efficiency of production in Niger over the last eight years (1981-88) reflects current conditions. With the alternative and more efficient ICOR of 2.6, GDP would have dropped by FCFA 3.8 billion.

So far so good. However, the ICOR approach remains silent about the timing of the expected impact of changes in investment on GDP level. While we can quantify the incremental GDP effect of ASDG transfer of funds, it is harder to tell exactly when these will happen.

To summarize, over the 1985-88 period, the immediate "expenditures" effects are estimated at FCFA 8.5 billion. On top of this, the "productive" effects of the ASDG transfer of funds on GDP are evaluated in the range of FCFA 1.2 billion to FCFA 3.8 billion. It is not possible to determine whether the "productive" effects would fall predominantly in the short-term or the long-term.

3.4.2 Impact of the ASDG Policy Reform on GDP

Long-run effects: The set of policy reforms aims at changing over time the structure of production of the agricultural sector. The intended effects would supposedly extend beyond the present horizon. For that reason, they are not easy to quantify. The

³⁷ It can be argued that this ICOR value (8.2) reflects the sizeable capital spendings going to the mining sector over the period considered. In light of this argument, we tried to estimate a sectoral ICOR which is more specific to the rural sector in Niger (see Appendix C). The estimated value of the sectoral ICOR turns out to be lower than the overall ICOR: it, however, falls within the 2.6 - 8.2 range.

³⁸ It could be also argued that the lower ICOR reflects an improvement in efficiency, inherent in the implementation of ASDG. However, this interpretation would exclude any lag between policy implementation and "reaction", which is hard to believe.

difficulty comes from (1) the lack of objective quantitative indicators reflecting the degree of success in the implementation process, and (2) the dynamic evolution of the structural changes initiated by policy reform implementation.

To illustrate this argument, let us have a second look at the ICOR approach. A successful implementation of ASDG policy reform would result in, inter alia, more efficient resources use and allocation. This can be translated into a lowering of the ICOR ratio (meaning less resources invested for the same amount of GDP generated). This looks simple enough. The real issues remain nevertheless very complex. First, to what extent will the ICOR ratio decrease in relation to the degree of success in policy implementation. Second, even in the case of a 100% successful implementation process, implying a drastic decrease in the ICOR level, when will this happen? In other terms, how to forecast the dynamic path of a changing structure?

Modelling complex phenomena is, of course, always possible, though at the increasing cost of a multiplicity of assumptions. The so called multi-sector "Computable General Equilibrium" (CGE) model has been often used to investigate the links between policy reform and performance in several countries undergoing structural adjustment (Cameroon, Ivory Coast, Jordan, Turkey to name a few). However, these models are well known for their exhaustive data requirements. Furthermore, they are usually highly sensitive to small variations in the parameters (estimated or assumed) of the model, resulting in unreliable results. Finally, while these models allow for the assessment of long-term macro-impact of policy actions, they are not easily amenable to "dynamics" analysis.

3.4.3 Summary: Impact of the ASDG Package on GDP

ASDG Transfer of Funds:

Immediate expenditures effects: GDP increased by FCFA 9.5 billion, over the 1985-88 period.

Productive effects: GDP increased by an amount in the range of FCFA 1.2 billion to FCFA 3.8 billion. Lag structure not known.

ASDG Policy Reforms:

Some preliminary estimates are shown in Chapter 2. The CGE model can be a useful tool to investigate the long run effects of ASDG policy reforms on key economic variables (GDP, BOP, Public Finance). Its implementation would however require a major effort in terms of data collection and analy-

sis.³⁹ It would usually take at least one man-year to complete the task.

3.5 Impact on the Balance of Payments

Table 3-6 does not evidence any improvement either in exports proceeds or in the current account deficit.⁴⁰ In interpreting these figures, however, one should account for the influence of exogenous factors (the sagging price for uranium, the variations in the Franc CFA/Naira rate, etc.). The following paragraphs will analyze the BOP impact of the ASDG package.

3.5.1 Impact of ASDG Transfer of Funds on the BOP.

It should be noted at the outset that a transfer of funds is simply a financing item in the BOP. It does not have any direct effect on exports and imports of goods and services, from which the current account deficit derives.

As mentioned earlier, ASDG funds served to increase the level of investment. Through the input-output linkages, these funds affect imports in an indirect fashion. Referring to the DEPP input-output framework, it can be shown that for each FCFA invested in the rural sector, total demand generated will amount to FCFA 2.5, out of which 44% will go to imports of goods and services (inclusive of salaries paid to technical assistants). Hence, with an increase in investment equal to FCFA 10 billion, incremental imports of goods and services can be estimated at about FCFA 11 billions.

In account of the productive effects of investment, there is also an augmentation in GDP level, by FCFA 1.2 billion to FCFA 3.8 billion. Since imports currently account for 20% of GDP, these variations in GDP would lead to an increase in the import bill of about FCFA 0.2 - 0.8 billion.

³⁹ To implement a CGE model, the list of required data includes, inter alia: (1) time series on capital stock and labor at the sectoral level (to estimate sectoral production functions), (2) an updated input-output table, (3) detailed trade data required to estimate the elasticities of substitution between imports and domestic goods (by sector), and (4) household expenditures survey (to estimate consumption functions by type of households).

⁴⁰ Also, as discussed in Chapter 2, a great deal of the trade with Nigeria takes place outside of official channels.

To summarize, through the expenditures effects of added investment, incremental imports can be estimated at about FCFA 11 billion, during the 1985-88 period. On the other hand, the productive effects of investment account for a relatively marginal increase in imports (FCFA 0.2 - 0.8 billion).

Table 3-6
Evolution of BOP
(in billions of Francs CFA)

	1983	1984	1985	1986	1987	1988
Exports of Goods (excluding Uranium)	141.2 (31.2)	132.8 (34.0)	112.6 (16.3)	114.8 (26.1)	108.6 (21.7)	110.4 (20.0)
Imports of Goods	167.2	139.1	158.9	126.2	120.6	131.3
Services, net	-38.1	-36.2	-37.8	-38.3	-42.0	-37.6
Private Transfers	-17.0	-14.0	-14.5	-15.0	-15.0	-14.5
Current Account	-31.2	-10.5	-25.7	-13.3	-26.3	-20.8
To be financed by:						
Official Grants	49.9	46.0	72.9	51.4	42.7	52.2
Capital, net	23.9	4.8	8.4	-4.2	17.7	6.5
Debt Rescheduled	3.4	21.5	20.0	20.0	15.4	15.2
Errors and Omissions	8.7	1.8	0.4	1.4	-2.7	-
Change in Reserves*	-4.8	-17.6	-3.1	-3.9	-4.1	0.1

* A (-) sign means an increase in reserves.

Source: IMF.

3.5.2 Effect of Policy Reforms

The effect of policy reforms on the balance of payments are in the short-run not clearly defined because they were swept aside by the dual effects of good rains and the rapidly depreciating Naira.⁴¹ The former increased cowpea production and livestock holdings while the latter increased the demand for Nigerian consumer products. As discussed in Chapter 2, the demand for Nigerian consumer goods actually tends to increase Niger exports to Nigeria as this trade has to be paid for. It is likely that the increase in exports was less than the increase in imports. Consumers benefitted from this and the Nigerian imports

⁴¹ Nigeria is Niger's most important trading partner, hence the importance of changes in the value of the Naira in terms of the Franc CFA.

actually helped reduce consumer prices. The ASDG reform package contributed to it indirectly because, except for the temporary ban on livestock exports, the Niger government did nothing to stop this trade in accordance with the agreement.

Reforms in the agriculture input market have led to an increase in imports of agriculture inputs from Nigeria. In so far as the imports are paid for with commodity exports, this has resulted in an increase in exports as well.

3.5.3 Summary: Global Impact on the BOP

ASDG Transfer of Funds:

Imports increase FCFA 11 billion through "expenditures" effects. The productive effects on imports are marginal (FCFA 0.2 - 0.8 billion).⁴²

There is no noticeable improvement in exports proceeds, due to exogenous factors.

ASDG Policy Reforms:

See Section 3.5.2.

These developments should not overshadow the fact that (1) in general, it takes time to develop export capacity and export volume, and (2) ASDG-induced imports are mainly related to investment activities. Provided that the chosen investment projects are economically sound, the Nigerien productive capacity will grow in the long run, inducing more imports, but, of course, a higher growth rate of Nigerien exports. This would hopefully contribute, in the long run, to a structural improvement in the BOP deficit. It is common for developing countries to go through a protracted period of current account deficit, in order to accumulate the material required to foster future growth of production and exports.

The lack of improvement in the BOP deficit should be interpreted in light of the previous qualifications. Without available external funding from ASDG, imports (in the formal sector) would need to be reduced drastically, with possible negative developments in future GDP growth. This points, however, once more to the need for "selective" spending, either with investment or with imports.

⁴² There was also the issue of US\$ 3 million going to finance technical assistance. Part of this amount will obviously be spent on imports, however this constitutes only a negligible part of the global import effect.

3.6 Impact on the Budget

Table 3-9
Evolution of the Budget
(in % of GDP)

	1984/85	1985/86	1986/87	1987/88
Budget Deficit	-9.4	-9.3	-9.5	-10.2

Source: IMF.

How much of the evolution shown in Table 3-9 can be linked to the ASDG program ?

3.6.1 Impact of ASDG Transfer of Funds on the Budget

It should be noted at the outset that a transfer of funds simply finances a budget deficit. It does not have any immediate and direct effect on the budget deficit, which by definition is equal to the difference between government revenues (tax and non-tax) and government expenditures (recurrent and capital spending). This is the more so in Niger, since the ASDG funds served to finance incremental investment activities. Under these conditions, budgetary uses increase by the same amount as budgetary resources, and it would be hard to claim that the budgetary deficit is alleviated by the ASDG funds.

We have argued earlier that the FCFA 10 billion worth of incremental investment activities contributed to an increase in GDP by Francs CFA 9.5 billion, through expenditures linkages, and by FCFA 1.2 - 3.8 billion, through the productive effects. Before the IMF-induced tax reform of 1987, the "effective" tax revenues/GDP ratio in Niger was estimated within the range of 9% to 10%. By application of this pre-reform ratio to the incremental GDP amount (due to expenditures and productive effects), the increase in GDP-based tax revenues can be estimated in the range of Francs CFA 0.9 - 1.2 billion.⁴³ Without ASDG funding, investment and, hence, GDP would have dropped. Revenues from taxation would have decreased likewise, resulting in a marginally higher budgetary deficit, other things being equal.

⁴³ By using a post-reform Tax/GDP ratio, we avoid incorporating the impact of the tax reform on the analysis.

3.6.2 Impact of ASDG Policy Reform on the Budget

In Section 2.3, we mentioned the reduction of input subsidies. These amounted to over 1.0 billion Francs CFA during fiscal year 1986-87 as discussed in Chapter 2 (expected to be over 4 billion Francs CFA during 1984-89). This contributes to an easing of the budgetary burden over the 1985-88 period. To this amount, one should also add the budgetary "savings", estimated at FCFA 1 billion during fiscal year 1986-87, resulting from restructuring OPVN as discussed in Chapter 2 (the OPVN savings are expected to save about 3 billion Francs CFA during the ASDG program period).

In the long run, ASDG policy reform affects the budget through increased production, income and trade. These ASDG-induced improvements would strengthen the tax bases from which revenues are derived. Since we cannot estimate the long-run improvement in GDP and trade, it would be difficult to quantify the impact of ASDG policy reforms on tax revenues.

3.6.3 Summary: Global Impact on the Budget

ASDG Transfer of Funds:

Increase in budgetary revenues, by about FCFA 0.9 - 1 billion.

ASDG Policy Reform:

Input subsidy cut (by the CA) saved over 1 billion Francs CFA during fiscal year 1986-87 and the savings are expected to increase in future fiscal years. As a result of restructuring OPVN, another FCFA 1 billion was "saved" during fiscal year 1986-87.

3.7 Impact on the PAAD Logical Framework Indicators

The PAAD Logical Framework refers to the following indicators:

- (1) no further deterioration in the BOP and budget deficits and debt situation, and
- (2) increased crop production and farmer incomes.

3.7.1 BOP, Budget and Debt Situation

In the preceding sections, it has been shown that the ASDG package does not have, in the immediate, any noticeable impact in

preventing any further deterioration in the current account deficit. We also analyzed in some depth the impact of ASDG on the budget deficit.

Concerning the debt situation, it would be hard to claim that ASDG has any immediate effects on the country's debt since the current outstanding amount of external debt originates from past indebtedness policies. Furthermore, ASDG does not include any conditions requiring the streamlining of debt management.

In the long run, however, ASDG can contribute to an improvement in the debt situation, for the following reason. Since 1984, through regular rescheduling (FCFA 12 billion per year), external debt service (actually paid) accounts for 30-40% of exports earnings. Debt rescheduling can be analyzed as the refinancing of old debts. When the maturity of these refinanced amounts comes through, the scheduled payments of interest and capital will increase. With higher export proceeds (induced by ASDG policy reforms), the GON may be able to come up with the cash to honor its debt service. It is through the strengthening of exports (i.e. capacity to pay) that ASDG can improve the debt situation in Niger.

3.7.2 Crop Production and Rural Incomes

Concerning rural incomes, due to the unavailability of household expenditures survey (the most recent survey dates to 1962), it has not been possible to carry out any really rigorous analysis. The discussion in Chapter 2 notes that if anything the income distribution pattern improved.

The removal of distortions in the market place should contribute in the long run to improving incentives for increasing agriculture production. The short-term effect would have stabilized farmer incomes through the village grain banks and the arbitrage by the private sector which is now free to enter the grain market. The private sector has also been efficient in supplying cheaper fertilizer from Nigeria which the CA could not have done due to the official Nigerian ban. If the CA had kept its input distribution monopoly this would not have been possible.

Increased stability in farm incomes reduces the risk from farming. Combined with the availability of cheaper Nigerian inputs, which would not have been available except at great cost to the public exchequer had the CA kept its monopoly, this would have induced an increase in production. Of course any production increase attributable to policy reforms is greatly overshadowed by the increase in agricultural production due to higher rainfall.

3.8 IMF/IBRD Policy Reform Initiatives vs ASDG

Since 1983, the Government of Niger has gone through a rigorous stabilization policy aiming simply, through belt-tightening measures, at stopping the deterioration of the external and internal deficits, supported by successive IMF stand-by arrangements. More recently, the focus shifted to an adjustment of the structure of the Nigerien economy, aiming for a more efficient resource mobilization and allocation, made possible by curbing the role of the state and by promoting the role of the private sector. Within the framework of the IMF ESAF and the IBRD Structural Adjustment Loans, the emphasis has been in three areas: Public Resource Management (restructuring the Budget), Reform of Public Enterprises (revision of economic incentive policies, changes in legal and institutional framework, rehabilitation and privatization) and Agricultural Policy changes.

Donors often disagree on their respective policies. However, this is not the case in Niger, at least as far as USAID, IMF and IBRD are concerned. There is a broad acceptance of the objectives set forth by ASDG, which are clearly incorporated in the IMF/IBRD Policy Framework Paper: (1) a reduction in the size and role of the public sector, (2) a better use of budgetary resources, (3) promotion of market-oriented mechanisms.

It is worth noting, however, that other donors are oriented toward Niger's food self-sufficiency, and their assistance strategies are essentially geared towards the short-run. This may contradict the longer term perspectives inherent to structural adjustment. As an example, one could refer to the subsidization of rice production which may prevent further development of profit-table cash crops for export.

3.9 Recommendations

Two recommendations can be made which will be useful in providing guidance to the on-going policy dialogue with Nigerien officials.

First, in light of the limited availability of resources, there seems to be a need to improve the rate of return of investment. A thorough streamlining of the procedures through which investment projects are analyzed and chosen may help to lower the overall ICOR in the future, in conformity with the spirit of the on-going structural adjustment reform. The absorptive capacity of the Nigerien economy will be enhanced, not through higher investment spending, but through higher and more efficient investment spending.

Second, the analysis of the BOP points to the need to diversify the export base. While it is difficult to define the a priori orientations of such a policy, one should aim, at least, at setting up a distortion-free environment which is conducive to the promotion of non-traditional exports.

To that extent, additional effort is required to define and formulate policy actions that would strengthen market-oriented mechanisms, and that would not contradict one another. To illustrate this last point, one could mention the difficulty of promoting diversification of agricultural exports while subsidizing rice production (which would exclude the alternative of growing other profitable crops). It is also true that encouraging increase in herd size runs against the maintenance of the productive capacity of the rural sub-sector, while strengthening the capacity to export livestock.

It is furthermore necessary to seek foreign assistance in the design of effective export promotion schemes (marketing studies, trade fairs, etc.)

As a final remark, it should be noted that a current account deficit may be a blessing, if the excess of imports (over exports) is put to good uses, so as to promote further growth (and exports) in the long term. Here again, the focus is on a better utilization of scarce resources (foreign exchange).

CHAPTER FOUR: THE COUNTERPART FUND

4.1 Introduction

Under the ASDG agreement, US dollar disbursements are subject to the fulfillment of conditions. Once the conditions precedent have been met to the mutual satisfaction of USAID and GON, the respective tranches are transferred to a special account at the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). BCEAO converts the transfers to local currency and these funds are then available for use by the GON. The fund is called the Counterpart Fund (CF) and is administered by a special office known as the Counterpart Fund Secretariat (Secretariat).⁴⁴ The CF can be used by the GON to finance its development operations, either through full financing of projects or through providing local counterpart contributions to projects financed by USAID and other donors.

The actual local currency disbursements are made following approval of the project or program by a Management Committee which includes USAID and GON representatives. There are certain ground rules established to judge the viability of projects. The Secretariat is responsible for screening projects/programs, but the ultimate decision making responsibility rests with the Management Committee.

4.2 Management of the Counterpart Fund

4.2.1. Selection of Activities

Institutional Aspects and Administrative Rules

The CF is managed by the Ministry of Planning, deputy "ordonnateur" of the Investment Funds.

Requests for funding are sent to the Ministry of Planning by the rural sector ministries.

A Joint Management Committee, composed of representatives from the Ministries of Planning, Agriculture and Environment, Animal Resources, Finance and Commerce, Industry and Handicraft, and USAID/Niger, is responsible for reviewing and recommending projects for funding. The Joint Management Committee is chaired by the Director of Investments from the Ministry of Planning. The committee is assisted by a Secretariat responsible for the documentation of proposals and the supervision of funded activities. The Secretariat includes 22 people: 10 professionals and technicians; one Executive Secretary, one Deputy Executive

⁴⁴ The Secretariat also administers the USAID Health Sector Grant.

Secretary, one Agricultural Advisor, one Sanitary Advisor, two Accountants, three Financial Analysts, one Financial Advisor (USAID Technical Assistant). In principle, the Development Economist from the Technical Assistance Team carries out economic and financial analyses for each proposal. Both the Financial Advisor (USAID Technical Assistance) and the Agricultural Advisor provide assistance to the Committee in its decision making, with the help of financial analysts. The latter do not have the training in economics necessary to carry out economic or financial studies, hence their task, as well as that of the Financial Advisor, is restricted to the supervision and monitoring of accounting and financial operations concerning approved projects.

The Executive Secretary is detailed from the Ministry of Planning, at a lower rank than that of the President of the Joint Management Team. Although the Executive Secretary votes in practice, he is not officially a voting committee member. OK

Practical Procedures: Classification Rules

According to the initial ASDG document (Project Implementation Letters # 4 and 8), resources allocation will be made in light of three principal criteria:

1. Maximize the growth in Incomes, Fiscal Revenues, and Foreign Exchange Proceeds.
2. Avoid contributing to projects with excessive recurrent costs in the near future.
3. Ensure that the gains from jointly-funded projects are higher than those coming from new potential projects.

Technical criteria for the selection and classification of activities are well-defined. They refer specifically to the contribution to policy reform implementation; immediate efficiency in terms of production, food self-sufficiency, and income generation; and USAID standard rules for project approval. These rules include traditional criteria for project appraisal, and stress the conformity of funded activities to policy reforms. OK

There is, so far, no standard document in which all funded activities are fully analyzed in light of the selection criteria, although the Secretariat is working at preparing one. A draft has been prepared and will soon be submitted to the Management Committee for review.

Finally, the CF is linked to a USAID grant and not to a loan. In general, loans from international organizations (IBRD, KFW, CCCE, etc.) come with the requirement of complete information on expected rates of return, and viability of the

OK
project. It would serve the interests of the GON to present projects, in a descending order with respect to their viability, first to the international lenders (IBRD, African Development Bank, etc.), then to the international funds well known for their (soft) lending terms (FAD, IDA), and, finally, to bilateral donors such as USAID. Unless the rural sector in Niger is full of viable projects -- which is certainly not the case -- it would be surprising that the GON through the Management Committee would finance the more viable projects with ASDG funds, especially if there is a possibility to finance an activity in its entirety. USAID, however intervenes in the review and approval of the projects to be financed through ASDG funds, and this reduces significantly the possibility of misallocation of CF resources.

4.2.2 Monitoring and Appraisal

The initial ASDG document does not anticipate specific procedures to monitor and appraise activities funded by the CF. These activities were meant to be coordinated and monitored by the Secretariat of the Management Committee. To the extent that the CF can be used to support agricultural policy reforms, it was thought that the technical assistance program would make some organizational or methodological contribution in that direction. However, this issue is not clearly referred to in the technical assistance TORs. Although willing to provide help, the current team does not consider that this task is part of the TORs with the exception of the Team Member based at the Ministry of Planning.

The obligatory USAID approval of proposals controls the conformity of projects to selection rules. A priori, this control can be based on analyses carried out by the experts from the technical assistance and Secretariat of the Management Committee.

The technical follow up of funded activities by the Secretariat is so far restricted to field trips, to be followed by back-to-office reports. There has been no systematic technical analysis. This is a major limitation that would impede any realistic programming of operations funded by the CF. This handicap is more important when one has to choose new projects, since past experience from old pipeline projects cannot contribute to guide future choices. It is recommended that projects presented to the Management Committee for approval be accompanied by a battery of indicators reflecting their technical efficiency, their economic and financial viability, and detailed methodologies related to the gathering of data needed to construct these indicators. Data collection should be done in the

field, and through accounting and financial documents.⁴⁵

The availability of these indicators on a regular basis would improve the information base available to the GON and to the donors. It is recommended that the financial monitoring of projects being carried out by the Financial Advisor and the Financial Analysts be strengthened. At present the Financial Advisor is attempting to set up a financial monitoring system, but its success requires the implementation of ground rules obligating projects funded by the CF to provide updated financial information to the Secretariat on a regular basis.

4.2.3 Contribution of the USAID Technical Assistance

There are implicitly four ways in which the Technical Assistance can contribute to the project selection process:

1. Participation in economic and financial studies (Development Economist). This was not in the original TOR but added in a latter amendment. As the Development Economist is kept extremely busy at the Ministry of Planning, it may be useful to hire a local Development Economist at the Secretariat who would work under the instructions of the TA Development Economist.
2. Source of general technical information concerning projects to be financed.
3. Collection of information concerning impact of already financed projects and reforms.
4. Financial follow-up of projects financed by the CF (Financial Advisor in the Secretariat office).

The last three functions are standard monitoring-appraisal tasks.

At a practical level, the effectiveness of Technical Assistance was diluted.

-Proposals are often presented to responsible officials only a few days before the Committee meets, preventing the possibility of any economic analysis. Information needed to carry out economic analysis is generally lacking.

⁴⁵ It is illusory to think that the Technical Assistance team can collect data on every project. Methodologies for data collection and sharing are to be included in the project financing agreement, and be linked to disbursements.

- The Development Economist (in Ministry of Planning) is kept busy with other tasks (Structural Adjustment Loan), which prevent him from devoting more of his time to the Secretariat.

- Difficulties in definition of a work plan (see Section 4.6).

4.3 Conclusions of the ASDG Mid-Term Evaluation (1986)

The Mid-Term Evaluation Report points to the necessity to document the decisions of the Management Committee and to organize the workload of the Secretariat in a more efficient way.

The report also recommends that strict accounting rules need to be applied in recording expenditures items, with the aim of singling out recurrent costs which are (or are not) of a self-sustained nature.

Finally, the report shows shortcomings inherent to the process of selection of activities, (in particular, at the level of economic and financial analysis). It is proposed that traditional criteria (i.e. J.P Gittinger's criteria) should be used. The report also emphasizes the role that the Technical Assistance Team would have to play at that level.

OK
Since the mid-term evaluation, the re-organization of the Secretariat was started with the appointment of new Executive Secretary. The Secretary lacks powers to discipline the staff but a start has been made to implement organizational changes. Accounting systems were computerized in 1987 and a new system installed. The Financial Advisor feels that there is a need to upgrade this system. The strict cost-benefit analysis of the project could not be implemented because very few requests come in with enough data to do so. However, a start has been made by the TA Team member at the Ministry of Planning and the Financial Advisor. A Guide des Requetes has been developed but it has not yet been implemented. Once this is done, it may be possible to carry out strict cost benefit analysis.

4.4 Results and Efficiency

4.4.1 Transfers to the Counterpart Fund

As of January 1989, total disbursements to the CF are reproduced in Table 4-1 below.

Table 4-1

COUNTERPART FUND					
	1 st tranche	2 nd tranche	3 rd tranche	4 th tranche	5 th tranche
Date	1985	1985	1987	1988	1989
Amount (US\$)	7 000 000	8 500 000	12 500 000	5 915 000	4 200 000
Equivalent PCFA (1000)	3 000 000	7 544 925	3 370 000		
Minus 5% Trust Fund	100 000	(177 246)	(190 000)	0	0
Total	3 157 000	3 267 679	3 180 000	0	0
Interests	101 533	235 470	113 641		
Total available	3 278 575	3 524 149	3 293 641	0	0
Total COUNTERPART FUND (US\$)					39 815 000
Disbursed (US\$)					29 000 000
Remains to be disbursed (US\$)					10 815 000

Transfers by Tranche

1st Tranche	:	US\$ 7,000,000	
2nd Tranche	:	US\$ 9,500,000	minus 5% Trust Fund
3rd Tranche	:	US\$12,500,000	
4th Tranche	:	US\$ 5,915,000	minus 8% Trust Fund
5th Tranche	:	US\$ 4,900,000	

As shown in Table 4-2, the conditions for US dollar disbursements for the three first tranches have been fulfilled. The US dollar disbursement process is working in a satisfactory manner.

Disbursements of the fourth and fifth tranches are linked to the implementation of reforms in the seeds sector and rural financial market development as well as the original reform plan. The fourth and fifth tranches will be released soon.

4.4.2 Respect of Rules for Selection of Activities

OK
At a practical level, the proposals are often reduced to a summary and qualitative description of goals. Economic and financial analyses are often missing, as well as the organizational chart or the schedule of activities.

Due to these shortcomings, it would be impossible to make use of planned indicators in the selection process. The ranking of activities according to objective criteria is thus very difficult to carry out.

OK
Incomplete files should be rejected, which is actually not always the case particularly since requests come through Ministers. The selection process can be improved as follows:⁴⁶

- adoption of standard compulsory format for requests;
- rejection of requests not providing all details required in standard format (proposed in the Guide des Requetes); and
- allowing more autonomy for the Secretariat, particularly to formalize the enforcement procedures for monitoring projects.

⁴⁶ The proposed "Guide des Requetes" designed by the Secretariat and the Technical Assistance is pending approval, but seems quite suitable.

Table 4-2

COUNTERPART FUND						
Tranches disbursement and compliance with Preceding Conditions						
Tranches						
		-I- 1995	-II- 1996	-III- 1997	-IV- 1998	-V- 1999
Conditions						
(1) FAD		100%	50%	25%	15%	15%
Financial situation			-41%	-54%	ND	ND
Internal Prices			48%	27%	ND	ND
Nigerian prices			28%	2%	ND	ND
International prices			246%	256%	ND	ND
(2) FAD		(*)		(*)		(**)
Actual						
(3) FAD		(a)				(aa)
Actual		a)				

(1): Progressive reduction of subsidy rates on inputs to 15%
Indicator: rate of subsidy (cf. end.3)

(2): Transformation of the Centrale d'Approvisionnement into an autonomous body
Indicators: (*) Existence of legal texts modifying the status
(**) Reviewing of the status of cooperatives

(3): Support to competition in marketing
of cereals
Indicators: (a) Absence of price regulations
(aa) Improvement of CPVN tender procedures

(4): Support to free border trade
Indicators: (b) Liberalization of cattle exports
(bb) Liberalization of cow peas marketing
(bbb) Simplification of cattle exports procedures.

Table 4-2 (contd.)

COUNTERPART FUND						
Tranches disbursement and compliance with Preceding Conditions						
Tranches						
		-I- 1985	-II- 1986	-III- 1987	-IV- 1988	-V- 1989
Conditions						
(4)	FAD	(b), (cc)				(ccc)
	Actual	(b)		(cc)		
(5)	FAD	(c), (cc), (ccc)				(cccc)
	Actual			(c), (cc), (ccc)		
(6)	FAD				(d)	(dd)
	Actual				(d)	
(7)	FAD					(e)
	Actual					?

(5): Support to development of rural financial markets.

- Indicators: (c) Redesign of legal framework so as to promote CMECs
(cc) Definition of an interim status for CMECs
(ccc) Exemption of CMECs of compliance with banking laws
(cccc) Implementation of a pilot project

(6): Seeds action plan

- Indicators: (d) Existence of a seed action plan
(dd) Execution of the action plan

(7): Laws enforcing quality control on seeds

- Indicators: (e) Existence of the laws

Sources: Log-Frame

PAO

Evaluation Conjointe, 1989

Adding personnel to the Secretariat is not a priority, at the first stage. The issue is to use the available resources in a more efficient manner. To be specific, the Development Economist at the Ministry of Planning should be used in accordance to his original TOR. Only when this is done would it be possible to evaluate the adequacy of the resources.

4.4.3 Uses of ASDG Counterpart Fund

An impartial analysis of the funds allocated by the CF requires, for each activity, the following technical and financial data:

- Total amount of funds -- including non-CF funds-- allocated, disbursed and spent;
- Calendar of scheduled and actual disbursements and expenditures by category; and
- Technical and financial indicators of performance.

These data should be consolidated for all CF funded projects. At present these data are available for only a few. For example, there is no information at the Secretariat on the amount financed by donors, in the case of joint financing with the CF.⁴⁷ This lacuna is hard to accept, as this information is inherent to project management. The establishment of such a data base should be incorporated as a priority in the TOR of the Technical Assistance. Data used in this report have been reconstituted by the Evaluation Team from several sources, but are not sufficiently detailed.

List of Financed Projects

The list of projects financed by the CF is reproduced in Table 4-3. Funds allocation, disbursement and expenditures corresponding to the previous list are presented in Table 4-4. Compared to allocations, disbursements (in FCFA) stand at 96%, and expenditures at 71%. These ratios can be considered excellent.⁴⁸

⁴⁷ This is available in the proposal forwarded the Management Committee but this information is then returned to the Ministry of Planning. It is not available at the Secretariat despite repeated requests made by the Executive Secretary.

⁴⁸ In total, FCFA 12.283 billion, disbursed in three tranches for a total amount of FCFA 10,626. The discrepancy can be explained by committed and undisbursed expenditures.

Table 4-3

COUNTERPART FUND	
List of projects financed by the fund	
No Project Title	Type of activities
1	Productivite Nisney II Integrated FD
2	Stock securité aliments detail
3	Fingoun Nord Irrigated rice
4	NVO-Tillabéry Irrigation, extension, credit
5	Subvention secteur sanitaire Sanitary infrastructures
6	Assistance labo sols INRAN Soil lab.
7	Relance céréalière Seeds distribution
8	P O U B F Creation of a technical forestry office
9	Formation et appui aux entreprises artisanales Support to cottage industries
10	Projet agroforestier de Farcoua Agro forestry, anti-erosion actions
11	Avion agricole Pesticides
12	Achat semences oie niaba Seeds
13	Pisciculture Namani Goungou Fish breeding; extension
14	Multiplication et achat de semences améliorées Security stock
15	Achat 2000 T engrais Fertilizers (revolving fund)
16	Appui aux opérations de développement rural Recurring costs of other projects
17	Programme National Rehab. Relance production animale Rehab of cattle stock; credit
18	Relance culture du niaba Seeds

Table 4-3 (contd.)

COLTERRAFT FUND		
List of projects financed by the fund		
No. Project	Title	
	Type of activities	
19	Felance Arachides	Seeds
20	Fonds de garantie PCN	Guaranty fund
21	Etude commercialisation et prix produits agric.	Study
22	Elaboration d'un code rural	Rural code
23	Charges recurrentes PCN	Research-Extension
24	Panneau irrigué à location laitière Dombou	Irrigation; Equipments
25	Pirgoun Sud	Feasibility study
26	Achat et vente de semences	Seeds
27	Aviculture villag. Maradi	Poultry farms; vet. drugs; survey
28	Creation d'emplois et generation de revenus	Support to GCEs
29	Etude hydrogéologique Gouré	Study
30	Infrastructure sanitaire	Sanitary infrastructures
31	Projet santé US-AID	Cancelled
32	Elevage intensif et sems intensif	Guaranty fund
33	Ateliers Production matériel agricole	Privatization of workshops
34	Réhabilitation élevage	Cattle stock rehab.

Table 4-4

COUNTERRAPT FUND					
Authorized, Disbursed and Spent Projects					
No Project	FOIPA			%	
	authorized	disbursed	spent	disbursed	spent
1	135 077 313	135 077 313	171 568 577	100%	97%
2	221 000 000	221 000 000	154 177 140	100%	70%
3	207 000 000	207 000 000	207 000 000	100%	100%
4	14 000 000	14 000 000	14 000 000	100%	100%
5	28 000 000	24 562 861	24 562 861	88%	88%
6	157 000 000	139 000 000	123 277 929	100%	65%
7	770 000 000	770 000 000	757 000 603	100%	100%
8	271 000 000	271 000 000	239 044 369	100%	99%
9	394 000 585	394 000 585	360 297 761	100%	97%
10	223 407 235	214 407 235	20 140 412	141%	76%
11	228 000 000	127 490 803	127 490 803	76%	76%
12	121 000 000	121 000 000	120 495 215	100%	100%
13	49 289 751	49 289 751	43 188 176	100%	97%
14	304 000 000	304 000 000	274 675 205	100%	100%
15	272 000 000	272 000 000	271 979 500	100%	100%
16	217 201 000	217 201 000	270 017 912	100%	74%
17	120 000 000	120 000 000	120 000 000	100%	100%
18	269 000 000	268 480 448	268 480 448	100%	100%
19	500 000 000	500 000 000	490 496 000	100%	100%
20	255 200 000	255 200 000		100%	0%
21	8 200 000	8 200 000	8 067 075	100%	98%
22	170 200 000	170 200 000	75 697 267	100%	44%
23	221 520 521	221 520 521	200 891 757	100%	95%
24	220 000 000	220 000 000		100%	0%
25	27 117 997	27 117 997	27 117 997	100%	100%
26	500 000 000	408 000 000	240 000 000	77%	60%
27	42 000 000	42 000 000	42 000 000	100%	100%
28	500 000 000	251 450 000		42%	0%
29	11 565 000	4 564 179		75%	0%
30	28 000 000	24 250 000	24 250 000	87%	87%
31	150 128 092	150 128 092	9 500 000	100%	6%
32	500 000 000	500 000 000		100%	0%
33	542 000 000	542 000 000		100%	0%
34	100 000 000	100 000 000		100%	0%
Total	12 282 998 475	11 846 505 677	8 673 251 866	96%	71%

Types of Uses

The difficulties encountered in collecting detailed financial data on activities financed prevents any in-depth analysis of fund allocation. However, based on an approximate analysis covering 53% of all expenditures (recorded at the end of April 1988), it was possible to classify expenditures into 10 different categories (Table 4-5).

Assuming that operation costs, input and labor costs are recurrent costs, the latter represents 78% of CF funds used, with the remaining 22% going to new capital acquisitions. Table 4-6 reproduces the results of an analysis covering 11 projects entirely financed by the CF, and for which data are available. The results are as follows: in six projects, recurrent costs account for 75% of total financing; in eight projects, they account for more than 25%.⁴⁹ Although it must be noted in the case of small-scale enterprises, such as artisan workshops, it is difficult to distinguish between recurrent and capital expenditures. It is difficult to define capital at that level of enterprise.

It must be noted that one of the ASDG program goals was to enable the GON to provide counterpart funding for donor funded projects. Generally, these expenditures tend to be recurring expenditures. Thus, there is an inherent contradiction in the PAAD. This contradiction may have been a deliberate attempt to reduce the percentage of recurrent expenditures. Furthermore, two major USAID projects, Niamey Departmental Development and the National Cereals Program, received a great part of this "recurrent" funding with USAID approval.

4.4.4 Relationship between Jointly-Financed Activities and Policy Reforms.

The project selection process described earlier does not always adhere to the spirit of policy reform. The most telling example of activities which contradict the spirit of reform is the purchase-distribution of seeds:

-Relance cerealiere	FCFA 700 million
-Semences ble-niebe	131
-Relance Niebe	269
-Multiplication	
achat semences	805
-Relance arachides	500

- TOTAL	FCFA 2,405 million

⁴⁹ The Technical Assistance, with total salaries accounting for 7% of total financing, does not have any major compensating role here.

Table 4-5

COUNTERPART FUND		
Expenses categories financed by the fund (April 1988)		
	Million FCFA	(%)
Operation	2 224	49%
Inputs	1 020	22%
Advances to projects	342	7%
Personnel	301	7%
Equipements	259	6%
Garanty funds	150	3%
Others	147	3%
Buildings	84	2%
Studies	13	0%
Training	12	0%
Total	4 562	100%

Sources

From Interim Economic Impact Assessment, chp 1, Tab 3
 The table has been modified as follows
 Improved seeds is removed from table (no detailed data)
 Niamey Prod. II & 609+48 million of OPEN-BIT
 go to operation expenses
 150 million from OPEN-BIT go to guaranty funds
 Appui aux operations de DR goes to operating expenses

NOTE: This table represents only 4,6 billion FCFA,
 (53% of total expenses)

Table 4-6

COUNTERPART FUND				
Expenses categories financed by the fund (new projects 100% financed, April 82)				
n° Project	3	13	9	18
Operation	0%	16%	74%	60%
Inputs	0%	0%	0%	10%
Advances to projects	0%	0%	0%	0%
Personnel	0%	15%	4%	9%
Equipements	0%	33%	5%	18%
Garanty funds	0%	0%	16%	0%
Others	0%	15%	0%	0%
Buildings	100%	16%	0%	0%
Studies	0%	0%	0%	0%
Training	0%	5%	1%	0%
Total Recurring costs	0%	33%	79%	82%

n° Project	25	28	29	19
Operation	0%	ND	20%	0%
Inputs	0%	ND	0%	100%
Advances to projects	0%	ND	0%	0%
Personnel	0%	ND	60%	0%
Equipements	6%	ND	0%	0%
Garanty funds	0%	ND	0%	0%
Others	0%	ND	0%	0%
Buildings	0%	ND	0%	0%
Studies	100%	ND	20%	0%
Training	0%	ND	0%	0%
Total Recurring costs	0%	ND	20%	100%

Table 4-6 (contd.)

COUNTERPART FUND				
Expenses categories financed by the fund (new projects 100% financed, april '82)				
n° Project	6	17	12	26
Operation	25%	2%	2%	12%
Inputs	0%	94%	78%	0%
Advances to projects	0%	0%	0%	87%
Personel	0%	3%	0%	0%
Equipements	0%	0%	0%	1%
Garanty funds	0%	0%	0%	0%
Others	75%	1%	0%	0%
Buildings	0%	0%	0%	0%
Studies	0%	0%	0%	0%
Training	0%	0%	0%	0%
Total Recurring costs	25%	99%	100%	12%

Table 4-6 (contd.)

COUNTERPART FUND		
Expenses categories financed by the fund (new projects 100% financed, acrl: 28)		
n° Project	Recurring costs	Non recurring Costs
12	100%	0%
19	100%	0%
17	99%	1%
18	82%	19%
29	50%	20%
9	79%	21%
13	33%	67%
5	25%	75%
26	12%	88%
3	0%	100%
25	0%	100%
28	ND	ND

These activities represent 19% of approved funding to date. Each of these activities includes a component of purchase of seeds, the sale of which will supply the revolving fund. These activities can be considered failures, to the extent that the revolving funds have not been important enough to renew stocks.⁵⁰

These activities contradict ASDG condition precedent # 1, according to which inputs (including seeds) should be supplied at their least costs, and through the widest participation of the private sector. The inability to renew stocks does not suggest that costs were at their lowest. Furthermore, these activities are typical of projects which generate recurrent costs in the medium term, since the link between purchasing and distribution needs be maintained. Studies completed within the Projet Semancier Technical Assistance (see Chapter 5) show that the total transfer of these activities to the private sector cannot be done in the immediate future.

Besides the Technical Assistance component, the share of studies is negligible (less than 1%). Studies of an operational nature would allow promotion of policy reform implementation in an efficient way, in particular, with regard to a realistic definition of practical conditions: feasibility studies for privatization or restructuring of firms, studies for the reorganization of the channel of distribution of inputs, household expenditures surveys, etc. Finally, the funding for training activities (besides the Technical Assistance component) is also small.

Revised procedures for circulating information are necessary. They should aim at providing better information to the Management Committee and the Secretariat, concerning the objectives and impacts of ASDG reforms, and how these will be translated in terms of potential projects, so that ASDG objectives and impacts will be taken into consideration as selection criteria. An easy move would be to send the technical personnel of the Secretariat to seminars or workshops organized by the SAPA/DEP of the Ministry of Agriculture and Environment.⁵¹

⁵⁰ All of the above programs were justified on grounds of emergency and crises particularly following the 1984-85 drought. While the necessity for quick responses during crises remains, it is not clear that use of ASDG funds which are intended for long-term development is the best source of funds during crises. Emergency facilities exist for that purpose, particularly at the IMF and World Bank.

⁵¹ Section d'Analyse des Politiques Agricoles, Direction de la Programmation - in effect the ASDG TA Team.

4.4.5 Appraisal of Activities Financed by the CF

Issues at Stake

Time constraints and the absence of systematic monitoring-appraisal procedures at the Secretariat have made it very difficult to have an overview of all the activities financed by the CF. The following analysis concerns projects visited by the Evaluation Team during its field trip. Two criteria were used to select the projects to be visited corresponding to two major issues faced by USAID, at the present time:

- a project favoring the management of natural resources and the environment by rural population, in an economically viable context: the agro-forestry project in Tahoua.

- a project assisting the development of profitable small scale activities and the development of the links between artisans and the banking system: the OPEN-ILO project.

a. The Agro-forestry Project in Tahoua

This project has been in existence for the last 14 years. Its funding was secured by successive donors (USAID, CF and currently DANIDA). The project aims at stopping the desertification process by planting wind-break trees (main activity) and building anti-erosion fixtures. CARE-International also provides Technical Assistance to the project.

By its main activities, the project contributed to the planting of more than 140 km of windbreak trees.⁵²

The current issue is how to generate resources necessary to the continuation of activities not included in the project. The project aims to assist several rural cooperatives in logging activities. (These cooperatives were created, not "naturally" formed). The assistance began in 1988, financed by the CF, and for the present, concerns only one cooperative.

The logging labor was pre-paid with an advance (FCFA 800,000) to the cooperative. The proceeds from wood sales would bestow some financial autonomy to the cooperative. six km (3,000 trees) were downed. The potential sales figure amounts to FCFA 7 million.

There are several problems to be resolved before the completion of this program:

⁵² In terms of agricultural profitability, the wind breaks play a negligible role. The main benefits would come from the conservation of soils and environment, and exports of logs.

- It is difficult to sell wood, in light of the modest quality of wood (mostly firewood), following 14 years of planting without rational exploitation. The consequence of this is that the actual sales figure in 1988 would be around FCFA 2 to 3 million. The cooperative needs to cut its price, relative to what is currently practiced in this region. This problem can be solved within the next five years.
- The cost of transporting wood to selling points is now paid for by the project, and free to the cooperative. Several studies have shown that invoicing at full cost would ruin the benefits of the operation. CARE envisions to charge at least for the fuel. It is also impossible to sell wood at the production site, due to the insufficiency of volumes.
- It is required that the logs be used within the project region, in order to contribute to regional self-sufficiency in energy. This requirement discourages private traders from transporting and selling the logs (the cooperative specializes only in production), since they would not be able to transport the wood to the more rewarding markets at Niamey.
- No procedure to reimburse the advance to the cooperative has been proposed yet, and problems can be expected at this level.⁵³
- The project expects a six-fold increase in production in 1989. Without any solution to the marketing problem, there may be surplus production.

The project is at a preliminary stage but it is clear that if the transport and marketing problems are not addressed in a satisfactory manner, one could end up with a situation diametrically opposed to the initial goal: the financial autonomy of the cooperatives will be replaced by their dependency on the project, and the possibility of a self-sustained activity will be endangered.

This simplified diagnostic identifies an important point, overlooked at the initial phase of proposal review, which concerns the study of commercial outlets and marketing channels. Even though the goal of the project corresponds to the ASDG (increased incomes for the poor, promotion of cooperatives, reduction of recurrent costs), the means to reach these goals are

⁵³ The Management Committee requested that the project provide a schedule for repayments. This was not done, but the project was nevertheless funded. This example illustrates the kind of difficulties faced by the Secretariat in monitoring projects and in observing management rules.

not well documented and there is some potential risk at this level. It is urgent to commission a commercial and sociological study, even if it would possibly lead to a modification of the goals of the project, towards a more self-sustaining orientation.⁵⁴

b. Projet OPEN-ILO

This is a project funded by the CF and jointly carried out by the Office de Promotion de l'Entreprise Nigerienne (OPEN) and the ILO which also provides technical assistance.

The objective of the project is to promote the development of small scale firms in the rural sector in six "arrondissements." Artisans will be trained in new techniques, and given adequate equipment. Their access to bank credit will be favored. Continued monitoring/assistance to trained artisans will be undertaken, so as to promote their insertion into the economic environment (supply, management, etc.)

Since 1986, 178 training sessions have been held, mainly in fields such as ironworks and metallic carpentry. The training was done in the artisans' homes, not in formal training centers. The training stage was the last stage of a long process of "stalking" and selection of potential candidates. In general, technical results so far recorded are excellent.

As with the Tahoua Project, the major criterion for appraisal was the ability of the trained artisan to continue his activities at the end of the project. The main constraint was his access to bank credit. Usurious interest rates are forbidden and banks are usually not eager to lend to artisans (insufficient guarantee, modest financial assets). On the other hand, bank credit is necessary for artisans to buy their equipment. Hence, the project came up with several formulas to encourage the artisan to invest and to reimburse later on:

- The project supplies the equipment directly to the artisans, on credit. This is a traditional formula which inconveniently links the artisan to the project for equipment supply.
- Constitution of a guarantee fund within a bank. The bank will use this fund to lend to the artisan. The fund will be replenished with reimbursed money. This formula is quite safe for banks. On the other hand, administrative procedures can be quite heavy, involving local authorities. The whole

⁵⁴ The TOR of such a study would include at least the following: present and projected supply and demand; share of production; existing and potential commercial channels; new outlets; costs of transport and supply; profitability projections.

operation is favored by the good performance of the Post Office through which, repayments by postal "mandats" are made possible, without requiring the borrower to move around.

- Finally, a formula is still on the drawing board to lend through the Postal Office, on the basis of an initial capitalization equal to one third of the amount of the loan. During the loan period, there will be a freeze on the capitalized amount which would constitute a guarantee for repayments. This formula is quite simple in terms of procedures, since it only involves the Post Office, which, through its numerous agencies, will help in spreading the credit.

These formulas seem to be well adapted to the Nigerien context; the rate of repayments to the guarantee fund is close to 84%, which is very high. However, there are also some problems:

- Lack of dynamism on the part of the banks. So far there is no risk for the bank in lending. Based on the current success, one could envision having the bank share a greater part of risk by guaranteeing only part of the loans.

- Absence of a legal and fiscal framework that would favor small scale firms. At present, the local authorities have a lot of room to decide the level of imposition of the firms (through the patentes). This issue should be addressed globally, through legislative channels.

The monitoring and programming of activities funded by the CF should lead to the definition (either before the funding, or during the implementation phase) of conditions that would warrant their success as self-sustained activities.

4.4.6 Financial Monitoring of Projects

As mentioned earlier, the financial monitoring is done by the Secretariat.

Until now, financial monitoring is simply accountancy monitoring: payments, bookkeeping, etc. For each project, there are two levels for monitoring: by activities and globally. At present, financial monitoring is essentially a simple activity. No analysis by expenditures is done, and there is no budgetary control.

Factors that contributed to that situation are:

- lack of systematized procedures. There is some progress in this direction, with the draft Quarterly Report. But the latter has yet to be approved by the Management Committee or to be considered as a compulsory tool for communication.
- difficulties for the Secretariat in imposing any procedure on the projects, due to its lack of effective power.

It is true that the material means and the existing staff of the Secretariat would not allow for a thorough exercise of budgetary control for all projects. Since the introduction of this procedure would require substantial training in monitoring at the level of the projects, a start may be made by applying the procedures to a select group of projects. It is essential that the procedures established be mastered by the Secretariat staff.

4.5 Relations with the National Budget of Investment

As mentioned earlier, projects funded by the CF are of an "incremental" nature, and contribute to increase the National Budget of Investment by an amount equal to the sum of disbursements (Table 4-7). This is corroborated by the manner in which these funds, or the "enveloppe" of ASDG funds, appear in the Investment Budget, i.e. as a "budgetary facility".

4.6 Conclusions and Recommendations

The CF was able to establish several operations to finance development. Disbursement rates are satisfying and show that funds can be rapidly deployed. However, there are two problems:

- The selection of activities financed by the CF: economic and financial criteria, and linkage with ASDG reforms; and
- Financial and technical monitoring of activities.

These difficulties are due to:

- The Secretariat's inability to fulfill its central role as a management tool for the CF (ideally, the Secretariat should be the center of information and the locus where all screening should be done).
- Several shortcomings in the operations of the Secretariat. There is room for improvement in on the way the Secretariat handles the analysis and monitoring of projects. Furthermore, the Secretariat's institutional position does not allow this office to oppose -- on technical grounds-- any decision, of a financial programming nature, coming from above.

Table 4-7

COUNTERPART FUND						
Total funding of projects						
FCFA						
No Project	CF funding	Other sources	Total funding	CF funding (%)		
31	160 128 092	?	160 128 092			ND
11	180 000 000	?	180 000 000			ND
2	220 000 000	?	220 000 000			ND
30	28 000 000	?	28 000 000			ND
21	8 200 000	?	8 200 000			ND
34	100 000 000	?	100 000 000			ND
33	542 000 000	?	542 000 000			ND
5	28 000 000	?	28 000 000			ND
32	500 000 000	?	500 000 000			ND
24	230 000 000	?	230 000 000			ND
7	770 000 000	?	770 000 000			ND
27	42 000 000	?	42 000 000			ND
23	231 520 581	9 475 260 000	9 706 780 581			2%
16	1 317 731 300	25 893 450 000	29 211 181 000			5%
4	10 000 000	140 000 000	150 000 000			7%
1	1 105 377 810	7 061 173 000	8 166 550 810			14%
22	170 338 000	407 721 000	578 059 000			29%
3	1 271 830 000	1 606 386 000	2 878 216 000			44%
18	269 500 000	0	269 500 000			100%
13	49 789 761	0	49 789 761			100%
28	598 323 700	0	598 323 700			100%
19	500 000 000	0	500 000 000			100%
29	11 766 074	0	11 766 074			100%
15	272 000 000	0	272 000 000			100%
12	131 000 000	0	131 000 000			100%
25	27 117 997	0	27 117 997			100%
10	223 437 385	0	223 437 385			100%
20	356 700 000	0	356 700 000			100%
9	1 094 936 586	0	1 094 936 586			100%
14	804 990 000	0	804 990 000			100%
17	100 000 000	0	100 000 000			100%
26	530 000 000	0	530 000 000			100%
6	189 900 000	0	189 900 000			100%
3	207 222 329	0	207 222 329			100%
Total	12 282 998 475					

The result is that the Secretariat serves more to allocate funds, outside of the Investment Budget, than to participate to the implementation of a global program (ASDG). USAID's veto power in the Management Committee effectively limits the damage that could be caused.

The solution to these problems rests in the establishment of better defined procedures and a better use of available means, such as the following:

- Participation of the Secretariat staff in seminars and workshops on agricultural policies.
- Adoption of a standard form for proposals.
- Automatic rejection of proposals not conforming to the norms.
- Introduction of a sufficient time lag between the submission of the proposal and the review of the proposal by the Committee (one month at least), to allow adequate time for analysis.
- Production of operational studies by the Agricultural Advisor, the Financial Advisor, the Financial Analysts and the Development Economist.
- In accordance with his TOR, the Development Economist should have more time to participate in the studies.
- The role of the Financial Advisor should be to strengthen the financial reporting procedures and financial monitoring of projects.
- The Management Committee will not review proposals until the background studies are complete.
- Creation of a data base of technical and financial information covering all funded activities.
- The Secretariat will set up a battery of project-specific indicators which will be included in standardized reports; establish procedures to collect information from projects; and permit participation of the SAPA/DEP in the tasks of defining indicators and collecting information from projects.
- Definition of the status of the Secretariat in the direction of more power to negotiate and control the activities

funded.⁵⁵ This could be done by giving the Executive Secretary direct access to the Minister and providing him more autonomy in day-to-day operations.⁵⁶

- Introduction of procedures of budgetary control and management over a number of selected projects.
- Project disbursements to be linked to submission of quarterly and standardized reports.
- Programming by the Secretariat of studies or measures to correct the development of projects, based on the actual experience of projects/programs funded.

⁵⁵ The efficiency of the Secretariat also depends on that of the Technical Assistance, and specifically on its ability to set up efficient monitoring-appraisal procedures, so as to motivate the decisions. For example, tranche disbursement (of a project) should not be penalized by delays in monitoring. Disbursements should also not be made without technical and financial appraisal, as is done now.

⁵⁶ Suggestions of the kind of authority required are given in Appendix B.

CHAPTER FIVE : TECHNICAL ASSISTANCE

5.1 Objectives and Terms of Reference

5.1.1 Objectives

The objectives of the Technical Assistance component are defined in the original ASDG document and in the agreement signed with the University of Michigan (CRED). These include strengthening the capacity of the GON to supervise and monitor the program, and to implement and identify the impact, at all levels, of the policy reforms. The Technical Assistance should work towards setting up within the DEP of the Ministry of Agriculture and Environment, a Section d'Analyse des Politiques Agricoles (SAPA), which will be given the main responsibility to monitor and appraise the impact of ASDG policy changes:

- collection of data allowing the monitoring of reform implementation and reform impact at all levels.
- promotion of discussion(s) on the policies to be implemented at the Ministry of Agriculture and Environment.
- establishment of recommendations aiming at changing the reform objectives, based on results and impacts recorded.
- training of local staff in view of future replacement for the Technical Assistance Team.

The agreement also stresses that the activities of the Technical Assistance should lead to the achievement of conditions precedent to foreign currency disbursements, through the training of Nigerien staff and the reinforcement of its analytic skills.

The program calls for the services of a technical assistance team, with the following Terms of Reference (TORs).

5.1.2 Terms of Reference

Senior Agricultural Policy Advisor (Chief of Party)

Duration of Assignment: until September 1989.

Counterpart of the DEP, Ministry of Agriculture and Environment.

Responsible for the establishment of the SAPA within the Ministry of Agriculture and Environment. Specifically responsible for the formulation of policies, and for assistance in implementing these policies.

In this capacity, the Chief of Party should coordinate all actions necessary to the start-up and functioning of the SAPA: analysis of existing policies, alternative policies, impact analysis, training, seminars, establishment of procedures to monitor the reforms, etc.

Agricultural Policy Advisor

Duration of Assignment: until September 1989.

Detailed to the Office of Monitoring and Appraisal of the Ministry of Agriculture and Environment, then to the SAPA.

Responsible for monitoring the implementation of policy reforms, through the collection and analysis of appropriate data and through specific studies. Serves as an advisor to the Chief of Party in the formulation of policies.

In this capacity, this Advisor coordinates the collection of existing data and provides analyses to determine the degree of implementation of policy reforms.

Microcomputer Specialist

Duration of Assignment: until September, 1989

Assists the Team in computer software/hardware use and planning. Provides support for studies, and develops and implements a training program in computer skills at the Ministry of Agriculture. In 1988 the post was converted to Information Management Specialist, in view of the need to create a central agriculture information system.

Development Economist

Duration of Assignment: until September 1989.

Detailed as project appraisal expert to the Director of Studies and Programming at the Ministry of Planning. Originally, the terms of reference did not include support to the Counterpart Fund Secretariat in the economic analysis of projects/programs. This component was added later.

Seeds Policy Advisor

Duration of Assignment: April 1988 to September 1989.

Attached to the Service National Semencier, the advisor should contribute to the restructuring and diversification of systems of production and distribution of seeds. In this

capacity, he should define the means to increase the production of improved seeds, to transfer the latter to the private sector or cooperatives, and to set up a national system of certification. He should define a seeds policy aimed at reducing costs. He should also define a corresponding work plan for implementation of the policy. Finally, he should define and collect data necessary to assess the impact of seeds reforms.

Financial Advisor

Duration of Assignment: until September 1989.

This position was not part of the original TA awarded to the University of Michigan Technical Assistance Team (UMTA). The position was created later, and instead of awarding it as part of the UMTA, it was staffed under a personal services contract. This person was expected to provide financial management assistance to the Counterpart Fund Secretariat and help develop a financial information base at the Secretariat. Specifically, the Financial Advisor was required to monitor whether the funds received by the sub-projects are actually used for the objectives stated in the proposals, and to ensure that adequate funds and internal controls are in place at the Secretariat and in the sub-projects.

5.1.3 Institutional Aspects

The Terms of Reference called for the dispersal of the TA team at various institutions. Consequently, their energies were dissipated by the multiplicity of counterparts and sources of instructions. Furthermore, this dispersal made the flow of information more complicated. At the same time, the benefits of this strategy are obvious. It allowed the TA Team to have a presence at various ministries and centers of decision making. The Advisors were distributed as follows:

Ministry of Planning: Development Economist.

Ministry of Agriculture:

- SAPA/DEPSA: Chief of Party, Policy Analyst, Micro-computer Specialist.
- National Seed Service: Seed Policy Advisor.

Counterpart Fund Secretariat: Financial Advisor (not part of the University of Michigan Team).

The absence of a clear directive in the Terms of Reference that the TA team gather operationally useful indicators increased the probability of the collection of a set of variables without a

globally cohesive pattern (see Appendix A). It must be noted, however, that quite a few useful tables were collected.⁵⁷

The work load imposed by the Terms of Reference turned out to be heavy with respect to the training component. The original plan was that the TA Team members would train their counterparts, but the absence of specifically assigned counterparts made this difficult. Therefore, a more formal training approach was necessary, which would require allocation of additional resources to training.

5.2 Conclusions of the Mid-Term Evaluation

The mid-term evaluation raised the following points:

- There is insufficient participation by Nigerien staff in the technical studies, and a general lack of contact between the experts and the staff of the Ministries.
- Limited training in the use of micro-computers has been provided.
- Training in agricultural policy needs to be increased.
- The TA should attempt to improve the speed and efficiency of the data distribution following computerization. to allow more time for analyzing the data.
- The Chief of Party should develop a work plan.
- It would be impossible to complete all the studies called for without accelerating their preparation with the increased participation of Nigeriens.

Therefore the mid-term evaluation recommended the following:

- Establish work plans with dates and objectives for each expert;
- Formally nominate counterparts;
- Require that, instead of reporting solely to USAID, the team should report to both the GON and USAID; and

⁵⁷ The TA Team noted that they had followed the suggestions given in a February, 1985 paper for USAID/PPC/CDIE/EASA (Chris Herman, "Information Requirements for Niger's Monitoring and Evaluating Agriculture Sector Development Grant," February, 1985).

- Transfer the Micro-Computer Expert to the Ministry of Animal Resources at the end of his contract.⁵⁸

The third recommendation was adopted, which helped to improve the perception of the TA team at the Ministries. The first recommendation was not adopted because the Team Leader felt that it was more important to be flexible. Counterparts have still to be formally assigned. The micro-computer expert was not transferred but seems to have an increased workload within the Ministry of Agriculture.

5.3 Achievements of the Technical Assistance

5.3.1 Agriculture Policy Analysis Section (SAPA)

The SAPA section was created in the Ministry of Agriculture's Planning Directorate (DEPSA), to include only the TA experts. The counterpart of the Chief of Party is the Director of DEPSA. The three experts attached to SAPA have achieved the following:

- Development of a computerized system for publishing agriculture statistics. The work consisted of training Ministry staff on computer data base compilation, for regular and timely publication of the baseline data for analyzing policy. The principal success was cutting two and half years off the time lag between the collection and publication of the data. There was little done in improving the methods used to collect the base data.
- Development of a computerized library and data base related to agriculture policy. The data base did not seem directly related to analyzing the ASDG reform package. It was mostly technical production and consumption data, and consisted of updated price trends. See Appendix A for a detailed discussion of data requirements.

Data base development took much of the time of the Micro-Computer Specialist. The rest of his time was devoted to training Ministry staff in the use of computers. The team members at SAPA also produced many studies and contributed to seminars and workshops. The most important studies undertaken were the following:

- Village Stocks Study (1986): A Quantitative Survey.
- Retrospective Study of the Supply and Demand of Fertilizer (1986): The study primarily concerned marketing of

⁵⁸ This was recommended to allow the Ministry of Animal Resources to acquire the micro-computer skills developed at the Ministry of Agriculture.

fertilizer. It concluded that the improvement of the CA's distribution network was important, and that private sector marketing alone was not completely feasible. It also emphasized the need for more data.

- A Study of Grain Banks and their Role in Food Security and Agriculture Price Stabilization in Niger (1987): This study concluded that the grain banks were only efficient at the local village level. The study pointed out that the profitability of these banks was undermined by storage costs, and that they were unable to compete with more classical marketing mechanisms. The study recommended training, expansion and monitoring of grain banks.
- First Phase Cooperative Cereal Marketing Study (1988): This study concluded that the cooperatives were not well adapted to marketing. Private traders had advantages over them, as the coops did not have access to full market information. A great deal of blame for this lay with the UNC structure. The study recommended that cooperatives be allowed to become independent commercial units with access to price and other market information.
- The Team also prepared several technical studies, including an Interim Impact Assessment of ASDG (revised once).
- They helped to organize the Table Ronde du Niger, a major and well-publicized forum on Agriculture Policy. This program provided wide exposure to agriculture policy issues.

Generally, most of the above studies were descriptive and informative rather than analytic. They focused on processes rather than on the macro or micro impact.⁵⁹ The studies were therefore only able to partially monitor the reforms, and recommendations were not always directly related to the reforms.

At the same time, the studies did not attempt to identify projects, programs and institutional reforms that would further the goals of ASDG. The TA team could have used the studies to help the Counterpart Fund Secretariat, even though this was not specified in the original Terms of Reference (it was added later). It would have seemed logical to focus some of the studies on the Secretariat as the institution charged with managing the bulk of ASDG resources. Recently, the team member at the Ministry of Planning has provided more assistance in this area.

⁵⁹ Particularly lacking were data and studies on farmers costs (including transport) with and without the reforms, calculation of effective protection coefficients, and the absence of macro-economic simulations to analyze the impact of ASDG.

Thus, even if a great deal of data were collected, there seems to have been no global framework established for the data collection which would have assured the collection of key indicators necessary to monitor the reforms. Thus, it was impossible to monitor the impact of ASDG using the data collected by the TA team. It should be noted that one key reason the TA was put in place was to monitor the ASDG program.

5.3.2 Ministry of Planning

The Development Economist was only able to devote a small part of his time to ASDG work. The Ministry insisted that he devote most of his time to what they considered the priority item -- preparation for the World Bank Structural Adjustment Loan (SAL).⁶⁰ At the same time he had to work on the investment budget. The Ministry also considered the advisor to be a general USAID TA person rather than as specifically tied to ASDG. He was asked to assist with the Health Sector Grant work at the Ministry, including ex ante evaluations. It is difficult to evaluate the impact of the contribution of this TA to the ASDG program. In particular, the advisor was not able to provide the assistance in economic and financial analyses of programs and projects submitted to the Counterpart Fund.⁶¹ On a more positive note, the Development Economist prepared a standard format to be used for requests made to the Counterpart Fund, though this has not yet been implemented.

5.3.3 Seed Component

The expert at the Seed Program has in a very short time produced a major technical program which fulfills his terms of reference. The speed was possible because he was able to draw on work previously done by other USAID projects and Mission Staff, including a plan to develop seed activities in Niger.

The preliminary analysis identifies the weaknesses of the present system. The costs of production are extremely high and it is not possible to reduce them unless production is expanded. However, the actual state of the basic seed material does not allow this to be done. It is difficult to sell to the peasants

⁶⁰ This problem, as discussed in Chapter 4, led to difficulties in the management of the Counterpart Fund.

⁶¹ The Chairman of the Management Committee, who is also the Director of Investments at the Ministry of Planning, noted that while he appreciated the need for such analysis, he would be unwilling to take the Development Economist off his work on the SAL program to work on the Counterpart Fund. The priority was the SAL.

who can produce the seed much cheaper. (The farmers are at the same time the customers and the competition.) The present system is focused on quantity rather than quality. Unless the quality is improved the relation between price and quality will remain low and farmers will not buy the seed. The major objective of this component of TA should be to improve seed quality. The production of large quantities of higher quality seed seems to be a goal to be reached far in the future.⁶²

A Seed Action Plan has been developed and approved. A detailed proposal is being finalized. The document should be published in March or April, 1989. The project follows a pattern fairly common in the region. It foresees the development of a first generation of seeds at a research station, followed by multiplication by peasants selected from the top 5% of producers enrolled in the Programme Cerealiere National (PCN). Gradually, the project is expected to be transferred to the private sector. The success of this program may be endangered by the preliminary nature of the commercial analysis. The seed expert seems to have devoted little time to the commercial aspects of the program.^{63/} A detailed practical study of how to transfer operations to the private sector is essential. It should be carried out by a Privatization Specialist and a Financial Analyst.

5.3.4 Financial Advisor

The Financial Advisor has been hampered in his work by the lack of procedures which allow the Secretariat to collect financial data from projects. As long as the data is not available, it will be impossible for the TOR goals to be achieved.

5.3.5 Achievements in Training Counterparts

Impressive success has been registered in the area of computer training at the Ministry of Agriculture, but little seems to have been achieved in training on agriculture policy. The Evaluation Team believes that failure in the latter is due to the following reasons:

⁶² This is not a problem unique to Niger but common elsewhere in the Sahel.

⁶³ The Consultant's experience in Guinea shows that the principal problem encountered in the privatization of seed activities is the need to create profit centers which would interest businessmen. Strong managerial and organizational skills are required.

- No initial analysis of training needs was done.
- Only the Micro-Computer Specialist devoted a major part of his time to training.
- The other experts were taken up by daily tasks and did not have the time to systematically train their counterparts.
- The Experts did not have assigned counterparts. While there is an advantage to associating different people with different studies, training which comes from daily collaboration suffers.

5.3.6 Flow of Information

Desirable Strategy

An optimal strategy for the flow of information would have been to focus on the ASDG policy reforms, and to analyze GON decisions and convey to the High Committee the impact of these decisions on the prospects for reform. At the same time, the spirit of the reforms could have been inculcated in the projects and programs funded by the Counterpart Fund. Thus, the High Committee, the Technical Committee, the Management Committee, and the Secretariat would have been kept informed of the process of reforms and their impact. This was not part of the original TOR but should be included in the Terms of Reference for ASDG II.

The essential thing is to maintain the flow of information to GON and USAID so as to assist negotiations and decisions. Many specific actions are possible, such as:

- Organize seminars based on the findings of the SAPA studies. These seminars should be attended by representatives from all groups concerned with ASDG, such as the Technical Committee, the Management Committee USAID, and Secretary-Generals of concerned ministries. Some seminars were organized but attended mostly by Technical Staff of the Ministries.
- Organize quarterly seminars to monitor the progress of projects and reforms. These seminars could then have identified necessary studies and directed the team to carry them out.
- Assist the Secretariat in project monitoring.
- Systematic training at the Ministry of Agriculture and Environment, and other involved Ministries.

Actual Experience

As noted in Chapter 2, GON has carried out policy reforms more or less on schedule. However, as detailed in Chapter 4, the management of the Counterpart Fund has had problems. The central role of the Management Committee does not seem to have been integrated into the work plan of SAPA. Furthermore, the studies conducted offered little guidance in the area of agriculture policy.⁶⁴ They seem to have been set up to produce informative documents, rather than aids to decision making. Thus, the actual experience of the TA was far from what would have been its ideal role. The principal weakness of the TA sprang from lack of specific purpose behind its studies and its interaction with the GON. The consequence was that the TA Team seemed to be functioning on its own.

5.4 Conclusions and Recommendations

The Technical Assistance component was conceived as a means to monitor and guide the operations of ASDG. The Terms of Reference required analytical, diagnostic, conceptual and motivational skills in the broad area of agriculture policy. The original Terms of Reference were well adapted to the needs of ASDG, but held some hidden dangers which became apparent later. The multiplicity of potential contact GON institutions and individuals created problems. The work load was high because of the combination of training requirements and analytical requirements.

The TA achieved several objectives:

- In SAPA/DEPSA a system was put in place to collect and publish statistics with minimal delays. They also trained DEPSA personnel in the use of computers, and produced studies on several aspects of the policy reforms.
- At the Ministry of Planning, the TA participated in the development of appropriate procedures for selecting and monitoring projects financed by the CF (Counterpart Fund).
- At the National Seed Program, the TA helped prepare a Seed Policy Statement.

The TA team failed to achieve several objectives defined in their Terms of Reference:

⁶⁴ For example, the lack of assistance in policy matters in developing the seed program.

- At SAPA/DEPSA, they failed to recommend specific policies in their studies, and failed to identify projects or programs suitable for funding by the CF. This was however not specifically required by the TOR.
- At the Ministry of Planning, little time was devoted to ASDG work due to constant demands from the Ministry to take up what were considered more pressing matters. After a four year presence there has been no help given to USAID to monitor the economic impact of the reforms.
- In the Seed Program, the Seed Advisor seemed to focus almost entirely on technical and production aspects. He also spent a great deal of time lobbying for policy reform.

The Evaluation Team recommends that much more attention be paid to the Terms of Reference so that the difficulties noted above can be resolved. The experts should be supervised either by a Macroeconomist or by an Institutional Specialist. The Chief of Party and the Agriculture Policy Analyst are doing basically the same technical work. The data collection tasks have reached a point where it would be useful to replace one of them with an economist familiar with macroeconomics. This person could focus on institutional development as well as organize information flows between the Secretariat, the Management Committee and the Technical Committee. Eventually, this person should become the Chief of Party.

The data collected by the team should conform to a global plan. Indicators that should be collected to monitor the impact of ASDG is discussed in Appendix A. It would be useful for the present team to start putting in place some of these indicators before completion of the present contract. The Team did collect useful information, but a lot of time was spent collecting data easily available elsewhere and unrelated to the overriding need to assess the impact of ASDG. Time could be devoted to gathering basic indicators which would be more useful in monitoring impact of ASDG.

It is difficult to make specific recommendations as to how the performance of the Financial Advisor can be improved. The lack of systematic data from projects has hampered his work. Recommendations are made in Chapter 4 as to how data collection can be improved. Once this data is available the Financial Advisor can be more effective.

Any future Technical Assistance effort must include a specific training component. It is important that GON staff be trained in policy reform as well as monitoring and evaluation.

CHAPTER SIX : CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction: The Track Record of ASDG I

An encouraging feature of the ASDG experience has been the willingness of the GON to undertake major policy reform. There have been some problems in their implementation, due primarily to a lack of comprehension of their importance. There have also been problems resulting from the institutional characteristics of some organizations, such as the UNC and the Cooperative movement, so that many key components of the reforms are dependent on organizations which are not yet adapted to their new roles.

Any future program needs to focus on two key areas: institutionalizing the reforms already undertaken and taking up important areas of reform either left incomplete or not dealt with by ASDG. Examples of incomplete reforms are the public broadcasting of prices of various agriculture products not yet established and the continued subsidies to cotton and rice farmers.

The Agricultural Sector Development Grant program was a very timely and necessary intervention. It was conceptually well designed and as long the projects funded through the counterpart fund were of the same average impact as other USAID projects, the ASDG program was superior to those projects as it brought with it the externalities of substantial and necessary policy program.

A key variable in determining whether the ASDG program was a successful deployment of USAID resources is the quality of the projects funded by the Counterpart Fund.⁶⁵ The record is mixed; The Fund has funded some good projects as well as some indifferent ones. At the same time, the Counterpart Fund filled an important role as it funded the local cost component of many USAID projects as well as projects run by U.S. PVOs.⁶⁶ The average performance of this latter group of projects is similar to USAID projects on average. Thus, on balance it can be argued that ASDG was a superior deployment of USAID resources.

The success of ASDG I suggests that a second similar program -- ASDG II -- can be highly successful. In fact, drawing on the lessons of ASDG I, it can be even more successful. The key area where changes can be made is in the management of the Fund at the Secretariat. The reforms recommended in Chapter 4 can be useful in making ASDG II more successful. ASDG II will have to focus on

⁶⁵ And the extent to which the funded projects conformed to the general thrust of the reform program.

⁶⁶ Private and Voluntary Organizations.

the conservation of natural resources.⁶⁷ This means that the Secretariat will need to have a staff keenly aware of the environmental impact of projects proposed for funding. Sometimes these impacts are not obvious; staff specialized in the environmental consequences of projects should be recruited.

Another factor that needs to be taken into account is the restructuring of the Technical Assistance. The Technical Assistance team must be able to provide the Secretariat with appropriate skills and training to manage the Counterpart Fund and in the monitoring and evaluation of projects.

6.2 Policy Reform Areas for ASDG II

Policy reforms are more easily achieved with program assistance than with project assistance. Therefore, a future ASDG effort would provide an opportunity for new reforms and for the consolidation of existing reforms.

6.2.1 Consolidate ASDG I Reforms

The most important aspect of any future program must involve institutionalizing the reforms undertaken during ASDG I. This will require a great deal of dialogue along with intensive training programs. The program must include ways to ensure that GON officials understand that the reforms help the economy of Niger, and are not just a price to be paid for the resource transfer. The Evaluation Team received the impression that few GON officials understood the economic benefits to be gained from the reforms, but viewed them as a price extracted by donors for their money.⁶⁸ It is imperative that the majority of the key GON staff eventually understand the logic behind the reforms and their importance to the economy of Niger. Otherwise the reforms will fail to take root.

The best way to consolidate the reforms already undertaken is to increase the numbers of people in government who understand the nature of the reforms and their benefits to government. Long term support only comes from people who are convinced that the reforms are beneficial to their country. To build that core of support, participant training, seminars, and other human resource development must be an important part of any future program.

⁶⁷ This is essential for the future quality of life in all countries, but particularly in such an environmentally fragile area as the Sahel.

⁶⁸ Fortunately, there are some people within the GON who understand the effectiveness of such reforms. It is to be hoped that the reforms will not easily be overturned when donor attention moves to other areas.

Support should be continued for the development of the Credit Union movement to mobilize the large pool of informal sector savings that exist in Niger. The key steps have already been taken up as part of the fifth amendment to the original grant agreement. A future program should continue to press for the development and expansion of the credit union system.

6.2.2 New Policy Reform Areas for ASDG II

The first reforms to be pursued in any subsequent program are necessarily those that were proposed during the present program and not achieved. At present, these would include broadcasting information on the prices of agriculture products and the curtailment of subsidies to cotton and rice production. Of course, ASDG I will be in operation until the end of the year. By then, some of these reforms may be fully implemented.

Subsidies were removed for most agricultural products, with the exception of rice and cotton. The question that needs to be asked is whether diversification through subsidies is economically optimal. The lands that are used for rice and cotton are irrigated lands. Farmers on these lands may have a much wider range of options than farmers in rainfed areas.⁶⁹ Providing incentives to produce inefficient crops in the areas of Niger which could be amenable to a wider variety of crop production seems to be highly distorting policy.

USAID and other donors such as the World Bank and the IMF need to demonstrate to the supporters of such policies the illogical nature of this approach to diversifying the country's agriculture base. The land that could be used for economically appropriate diversification is tied up in growing sub-optimal subsidized crops.

The removal of these subsidies should be an important component of Phase II policy reforms. If the radio broadcasting of agriculture prices is not put in place by the end of the present ASDG program period (September 1989), this too will have to be a priority for ASDG II.

One key weakness during the implementation of ASDG I has been the centralized structure of the of the cooperative system in Niger. The system is more like a government organization to mobilize the rural population than a true grass-roots cooperative. The legal code needs to be changed to allow the development of independent cooperatives. Only when the official

⁶⁹ It is possible that once the subsidies are removed, the farmers may continue to grow the same crops. But as long as these subsidies are in place distortions result in cropping choice and the economy may be functioning sub-optimally.

system faces competition from the independents will the system be forced to reform itself. At present, the UN-led Cooperative movement functions like a parastatal with monopoly powers. As noted in Chapter 2, code revision is underway and should be finalized soon. Under the revised code, individual cooperatives may be given more independence but it seems unlikely that independent cooperatives will be allowed. Anyway, little can be proposed until the reformed legal code is released.

Apart from these 'old' reform areas, the most pressing new area has to be natural resource management. ASDG I has already contributed directly and indirectly to this goal. By reducing subsidies on fertilizers and pesticides, it has reduced their use in marginal areas. Use of chemical inputs in marginal agriculture areas tends to have grave environmental consequences. ASDG I has already contributed to the cause of conserving the Sahel's fragile resource base. The CARE forestry project which has received substantial funding under ASDG I is another example of an environmentally sound project. That project combines private benefits with a reforestation program, so that it brings economic benefits to the communities served, and also has a positive environmental impact.

In a future program, policy reform in the area of natural resource conservation should be emphasized. For example, overgrazing on marginal lands tends to increase desertification. The benefits to individual livestock owners of grazing on marginal lands outweigh the private costs, while the public costs far outweigh the public benefits. Taxes or user fees may be used to ensure that private costs correspond to public costs. This is likely to be more successful than an outright ban on livestock grazing. It has been suggested that user charges are very difficult to administer. Given the immense nature of the problem, there is very little choice in the matter.

Programs that increase costs to livestock holders grazing on marginal lands are likely to have negative equity consequences, as livestock holders are generally from the poorest segments of the population. They must be compensated for through targeted projects run by PVOs or others. The poor livestock herders who would be hurt by a tax or user fee can be helped through special projects such as relocation and retraining assistance. A pilot program could be undertaken from which lessons can be drawn and applied to a national program. This could be done as part of ASDG II or as separate projects targeted to the poorest of the poor so that they are not hurt by the short-run consequences of the reforms.

All should benefit in the long run; if such future programs can make breakthroughs in areas such as natural resource conservation, much will have been achieved to safeguard the future of Niger. Many details will have to be worked out,

specific measures must be analyzed, and political constraints recognized for a successful future policy reform program to be achieved.

6.3 Institutional Aspects of ASDG II

The overall success of ASDG I notwithstanding, several institutional difficulties were encountered. The key areas have been identified in Chapters 4 and 5 of this report. In this section, we will attempt to summarize the elements necessary for the success of any future ASDG type program.

It has already been noted that a key variable influencing the success or failure of these programs is the quality of projects funded by the Counterpart Fund. Thus, the projects brought to the Management Committee by the Secretariat for funding should meet certain basic criteria for selection. The present ad-hoc system has resulted in some good projects and a lot of indifferent ones. The record needs to be improved. To achieve this goal, important changes are required both at the Secretariat and in the functioning of the Technical Assistance Team.

① | The changes in the Secretariat should begin as suggested in Chapter 4, with more day to day authority and independence given to the Executive Secretary. The present system gives little power to the Executive Secretary. Consequently, staff in different GON departments and in the projects do not feel the need to follow his guidance. Too much day-to-day authority is given to the Management Committee and to its chairperson.⁷⁰ Unfortunately, the head of the Management Committee is one of the busiest people in the Government of Niger. He has little time to devote to day-to-day administration of the Secretariat and the projects. The head of this committee needs to coordinate investments by the Counterpart Fund with overall national investment priorities, and should continue to do so. The day-to-day management is best left to those who have time for it. Otherwise, the quality of the projects suffer, particularly with regard to monitoring and evaluation.

② | The Technical Assistance team has to take an active role in training the Secretariat staff and other GON staff in monitoring

⁷⁰ For example, 'ordres des missions' need to be approved by the Chairperson, the Secretary General and the Minister. Thus, the staff are not able to easily undertake travel to monitor various projects or to play an active role in their evaluation.

and evaluation of the projects.⁷¹ The TA team has not devoted sufficient time to improving the quality of the work at the Secretariat, due to the many other demands on their time and to the feeling that the Secretariat was not a key body and the decisions were made elsewhere.⁷² This may be true, but as long as the Secretariat remains technically weak, other GON units are unlikely to entrust it with much power. To break out of this cycle, future TA efforts must make training Secretariat Staff a priority.

(3) Future TA, apart from helping with institutional development at the Secretariat, must also develop a system to monitor the impact of the program. A simple base line survey would be useful. It does not have to be a major survey designed to provide statistically acceptable results. A well chosen small cross-section of households monitored through the program period will provide many insights into the impact of the program. This is discussed in detail in Appendix A.

(4) An important requirement for the long-term success of a healthy rural development program is the existence of a strong grass-roots cooperative system. At present, apart from a few cooperatives organized by the CLUSA/GON project, the cooperative movement is a centralized organization which provides benefit to grass roots farmers and artisans. The history of the development of successful cooperatives shows that a key reason for their success is the farmers feeling a strong need to cooperate. Some of the most successful cooperatives in the world have been those marketing dairy products.⁷³ Dairy farmers need the cooperative to consolidate marketing a highly perishable product. Cooperatives that succeed must be able to offer their prospective members significant individual benefits. Only when they perceive that their private benefits from uniting exceed their private costs will they join the cooperative movement.

ADD A cooperative development program should be pursued as part of ASDG II. It would be better pursued outside the officially mandated cooperative structure so that the cooperatives in the official system are forced to undertake reforms. Two legal changes are required: first, the cooperatives must be allowed to function as independent business entities. Second, the legal

⁷¹ Of course this presupposes that the Secretariat has the authority to act autonomously.

⁷² It should be re-emphasized that this was only in the Terms of Reference of one TA team member, and that was added as an afterthought.

⁷³ Examples are "Land of the Lakes" in the U.S.A., "Amul" in India, and "Union Laitiere Normande" in France.

structure must be changed to allow for the development of independent cooperatives. However, any decisions on the exact changes in the legal structure must await the final publication of the legal framework now under review.

6.4 Summary and Recommendations

6.4.1 Policy Reforms for ASDG II

ASDG I has been a successful program, with some problems. These problems, however, provide insights that will allow a future program to be even more successful. The Evaluation Team strongly recommends that a similar program be undertaken.

ASDG II should try to consolidate the policy reforms made during ASDG I by training GON staff in the benefits of the reforms. Only if they perceive these benefits will they support the reforms.

ASDG II should consolidate the pilot moves made towards the development of credit unions. A final legal charter should be drawn up for the credit union system, and the number of unions expanded.

ASDG II must focus on reform of the cooperative movement in the country. The legal charter must be modified to allow for independent cooperatives as in Senegal. Individual cooperatives or Groupement Mutualistes Villageois (GMVs) must also be allowed to function as independent business entities.

ASDG II must push for country-wide broadcasting of agriculture price information. This is an important element in the efficient functioning of markets, and should primarily help farmers, small-scale traders and consumers. Larger scale traders already have access to this information.⁷⁴

It is ironic that the best agriculture lands in the country, the irrigated areas, are being devoted to producing subsidized crops (rice and cotton) in the name of agricultural diversification. The very area which is possibly suitable for growing a diverse variety of crops is tied up with growing economically inefficient crops.⁷⁵

⁷⁴ At present, USAID-Niamey's action plan includes a feasibility study of the radio broadcasting of agriculture prices. Also, it must be noted that farmers are not completely uninformed of prices. Nigerian Radio broadcasts grain prices in Hausa.

⁷⁵ It was noted by some that the irrigated perimeters are suitable only for growing rice. If that is the case, once market forces are free the areas may be devoted to rice anyway. However,

A crucial need in the fragile environment of the Sahel is natural resource conservation. Policy reforms must be pursued in this area. Projects funded under ASDG II should be scrutinized for their environmental impact. Some policy reforms required to conserve natural resources, such as limiting grazing in marginal areas, are likely to have negative consequences for the poorest segments of the population. These groups could be compensated by projects targeted specifically to their needs.

6.4.2 Institutional Changes Required for ASDG II

The Counterpart Fund can play a very important role in ASDG II if it is better managed. The history of ASDG I indicates that the Counterpart Fund can mobilize resources quickly and effectively. The other option is a direct transfer of funds, but that provides no guarantee that funds will go to investment. The benefits to GDP from investment are a component of the overall benefits of ASDG.

① The Counterpart Fund Secretariat has to be consolidated and given much more effective power in day to day operations. The Management Committee should continue to coordinate the investments made by the Secretariat to make sure that they fall within national priorities. The day-to-day selection and analysis of the projects should be left to the Secretariat. The Secretariat should acquire staff trained in environmental impact analysis.

② The Technical Assistance team should spend a significant proportion of its time training Secretariat staff in monitoring and evaluation of projects. They should also train staff in the environmental impact analysis of projects. It may be useful to include a short or long-term Environmental Specialist on the TA Team.

③ From the inception of the project, the Technical Assistance team should set up a program to monitor its impact. One way to do this would be to monitor a selected representative cross-section of households over the course of the project.

A project to build grass-roots cooperatives should be funded under the program, focusing on building independent cooperatives

this is difficult to know in an environment of subsidies and cross-subsidies. If the perimeters are unsuitable for other crops, that is not an argument for continued subsidies. In economic analysis, a sunk cost has to be ignored in feasibility studies. It should not be used to justify continuing subsidies and drain on the GON budget.

to provide competition to the official system. This would spur the existing system to much needed reforms.

A very important component of ASDG II should be training in the area of policy analysis, and aimed at strengthening constituencies for reform within the government.

Appendix A

Collection of Data by the TA Team to Monitor the Impact of ASDG

1. Introduction

The Technical Assistance Team was charged with developing a methodology and collecting data to measure the impact of ASDG including its component policy reforms. The Team collected a great deal of data and contributed vastly to shortening the time lag between the data collection and their availability for analysis. The key indicators collected included to quote a memo from the TA Team Leader, "crop production statistics, input use, official and free market prices of all major commodities, OPVN purchases and sales." The memo adds that the data was in many cases available elsewhere, but the Team contribution speeded up the time in which the data became available for general use. The files are grouped together in a data base named BASDONAG.

The general question arises of whether this could not have been done by the systems analyst alone with some TDY assistance and local help. The Evaluation Team believes that if there had been an initially well thought out data collection workplan, the work could have been done with little input from the Policy Analyst.

The data collected lacks a coherent framework. The first task should have been to develop a conceptual model to assess the impact of ASDG and then to collect the variables necessary for this model. Once that essential task was accomplished, the team would have been free to collect any other data they felt was important. It is evident from the data files that there was little thought given to assessing ASDG impact in the determination of variables to be collected.

It should be noted that much of the data in BASDONAG were collected for the needs of studies, some of which dealt with ASDG issues. Therefore, the problem with the data was not complete inattention to ASDG issues, but a lack of the variables necessary to specifically monitor overall ASDG impact. This may have been due to the lack of resources to collect some necessary data. Also, the choice of indicators depended to an extent on the recommendations of a study on the type of data to be collected during ASDG.

2. Relevance of the Data Gathered to Analyzing Impact of ASDG

Generally, the data is very useful. The daily Niamey cereal price and origin data, for example, is very useful. This data is collected directly by the Team, and would not be available otherwise. This data provides information on the impact of Nigerian cereals on the Niger market and also provides very important information on prices.

The Terms of Reference of the Evaluation Team request an evaluation of the usefulness of this data in assessing the impact of ASDG reforms. Apart from the data on the OPVN operations and to a lesser extent the Niamey grain market data, most of the other data were not directly useful. To illustrate an example, the input sales by the CA is already available in the CA annual reports along with costs, revenues etc.. Apart from the Fertilizer Demand study, little was done to assess the demand for fertilizer outside of official sources. Information on the impact of the reforms on the private sector is required to monitor ASDG. This information is not readily available. Aggregate production data is of little use in isolating the impact of ASDG reforms. Aggregated data will include the impact of other variables, such as good weather.

It is difficult to obtain data required to monitor the impact of individual policy reforms from secondary sources. Primary sources are required. The TA Team should have collected data for monitoring two selected groups - households drawn from different urban and rural strata of Niger, and businesses. This data would be useful in monitoring the impact of the individual policy reforms.

Furthermore, data base development was required by the TOR to help monitor variables to assess the impact of ASDG. The Team generally ignored variables which they believed were easily available elsewhere. There is no evidence that they examined the validity of this assumption. Even if it were a valid assumption, these indicators should have been included in the data bank.¹

3. Monitoring Selected Sample Groups over Time

The groups monitored do not have to be a statistically valid sample, but should provide operationally valid indicators. The use of such representative groups is not new. They can provide insights not available otherwise.

This sample should be monitored for key variables such as use and source of inputs, the impact of removing of OPVN's price stabilization role, the removal of CNCA credit facilities, and the impact of increased border trade. In addition to the household panel, a panel of businesses should also be monitored for the impact of the policy reforms.

Both of the samples should be treated as case studies, rather than as questionnaires. The case study approach has a clear advantage over a questionnaire approach in that initial

¹ If the data were easily available then the time and effort required to collect it would have been minimal.

responses can be followed up to examine the underlying basis.² The data collected from a case study approach is less amenable to standard statistical analysis. Nevertheless, the case study approach has a good track record in providing operationally valid indicators, even if it does not lend itself to providing statistically significant results. Its biggest advantage is that it is quicker and cheaper to collect data using the case approach.

4. Use of Other Secondary Data

The data base does not include projects and programs included in the agriculture sector investment program. This would have been useful to see how the reforms were affecting the choice of investments by the government. The data is available elsewhere, as is much of the data actually included in the data bank. The data on projects would have provided useful information to the Management Committee and the Secretariat of the Counterpart Fund.

Farm budgets developed by various organizations could be analyzed to assess the impact of different policies on the profitability of individual farmers. These could be regularly updated as input and output prices changed. The price data is available in BASDONAG files. Sample farm budgets are available from INRAN, ICRISAT, and other agricultural research centers.

5. Conclusions

BASDONAG lacks essential data for monitoring the overall impact of ASDG, with some exceptions. This may be due to the lack of resources for monitoring selected households and businesses over the period of ASDG. If this is the case, any second stage TA must have adequate resources to collect this data.

Resources may also be added, if necessary, to the present contract so that University of Michigan Team can begin setting up the sample studies. This can be taken over by subsequent TA teams. It is important to make a start in this matter, otherwise the status quo may be taken as a guide in the matter of data collection during Phase II.

² The Consultant carried out case studies of eighty businesses in the Caribbean. In the beginning, many complained about lack of financial resources. However, follow up questions revealed that when they had sound business ideas/expansion plans, they had had no trouble securing credit from commercial banks. Apart from the fact that money is a scarce resource, there seemed to be little lack of funding for established businesses if they had good projects.

Appendix B

Specific Proposals for Strengthening the Powers of Secretariat

The Evaluation Team proposes that the power of the Counterpart Fund Secretariat be strengthened to allow it to play a more effective role in the implementation of ASDG. These changes are not meant to undercut the role of the Director of Investments, who should continue to preside over the Management Committee and provide the coordination required between Counterpart Fund investments and other investments. They are recommended in view of the fact that the Director has little time to devote to the day to day functioning of the Secretariat. Also, it is important to separate the operational role of the Secretariat from the decision-making role of the committee. The changes are in two categories: legal and procedural.

Proposed Legal Changes

The specific powers required by the Executive Secretary are:

- to recruit, dismiss, and discipline Secretariat staff, and
- to issue "ordres de mission" to Secretariat staff so that they may pursue their project evaluation and monitoring functions as necessary.

Required Procedural Changes

The Guide des Requetes should be adopted and all project requests not providing the data required in the dossier should be rejected outright.

The data in the standard dossier should be used by the Secretariat to carry out preliminary economic and financial analysis of the requests. The TA team member at Planning and the Financial Advisor are ready to play a key role.

A data bank (financial, economic and technical) on all projects should be assembled. As a start towards this goal, data on a selected sample of projects should be collected with the help of the members of the TA Team at the Ministry of Agriculture (a modification of their TOR may be required).

The Executive Secretary should request the Management Committee to discipline Counterpart Fund projects which do not provide regular financial and other information on their progress to the Secretariat. This may simply involve establishing procedures to issue reminders to defaulting projects, and, if requests are not honored, to request the Management Committee to suspend disbursements.

APPENDIX C

Building Constituencies for Reform in Niger

The ASDG reforms are likely to have a very positive impact on the economy of Niger. However, to really have an impact on the agriculture sector in Niger, there must be a constituency for them within the government. To develop such a constituency the government officials must realize that the reforms are beneficial to their country. To many in government at present, these benefits are not clear. There is a need to educate them and others so that they may understand the benefits of reform and become active supporters.

There are several ways to achieve this goal. The most permanent effects are from full-time formal education programs at appropriate universities in the U.S. or elsewhere. Participant training for more senior staff is also helpful. Once the number of the staff trained and supportive of reforms has reached a critical number, they can advocate the benefits to their country of reform programs.

"Table Ronde" and similar exercises which achieve a lot of publicity are useful. But the battle for reforms takes place daily and the most critical element for success is the 'footsoldiers,' i.e. members of GON staff who understand how the reforms help their country. It is important that this group reach a critical mass within each department.

In addition to these activities, GON staff need to learn about critical issues. Future programs must proceed on a multi-faceted front : long-term degree training, participant training, 'Table Rondes', research and seminars.

APPENDIX 12

Computation of ICCR for the Rural Sector (1979-83)

	1975	1977	1978	1979	1980	1981	1982	1983
					in current FCFA billions			
GDP (RURAL SECTOR) 1/				197.6	229.0	278.7	314.1	338.6
FIXED INVESTMENT IN RURAL SECTOR 2/	n/a	n/a	n/a	18.3	20.6	18.9	18.1	21.9
					in constant FCFA billions			
GDP (RURAL SECTOR) 3/				197.6	201.2	218.9	226.2	224.0
FIXED INVESTMENT IN RURAL SECTOR 4/	n/a	n/a	n/a	18.3	19.0	16.1	14.4	16.3
Variation in GDP			224 - 198				26	
Cumulative Ag. Investment			18+19+16+14				68	
ICCR (1979-83)			68/26				3	
Memo Items:								
GDP Deflator				100	114	127	139	151
Index				7.6%	13.8%	11.9%	9.0%	8.8%
Growth Rate								
Investment Deflator				100	109	118	126	135
Index				6.0%	4.3%	13.3%	8.8%	8.0%
Inflation Rate							7.0%	7.0%
Share of Rural Sector Investment wrt Total Fixed Investment 1/				14.8%	13.6%	13.7%	16.4%	22.7%

1/: source ASDG PAAD Statistical Appendices.

2/: estimated by Evaluation Team, based on the annual share of capital expenditures in the rural sector with respect to total fixed investment (see Memo Items).

3/: deflated by GDP deflator.

4/: deflated by Investment deflator.

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APPENDIX E

Fertilizer Subsidies in Nigeria and their Potential Impact on Niger

Nigeria has had a long history of subsidizing fertilizer. The historic evolution of fertilizer subsidies during the immediate past years has been interesting.

The effective subsidy rate on fertilizers was 78% in 1984. A World Bank adjustment program required this to be reduced. By 1985 it had dropped to 52% and it had dropped again to 38% by 1986. The subsidy rate rose to 75% in 1987 and the recent budget indicates that subsidies are now between 75% and 80%.

During 1987, the last year for which the evaluation team had complete data, fertilizer in Nigeria sold at 10 Naira for a 50 kilogram bag. At the official rate of exchange, this was equivalent to 27 FCFA per kilogram, while at the parallel rate the price was 15 FCFA. The market price in the Niger border areas for Nigeria fertilizer was about 45 FCFA. The mark-up for traders who brought in fertilizer from Nigeria was therefore quite high.

The leakage to Niger is an insignificant part of the total market for fertilizers in Nigeria. The reduction of fertilizer subsidies in Nigeria does not seem likely in the immediate future. Despite the reduction brought about by the World Bank program, subsidy rates increased as soon as the program ended. The Government of Nigeria is now considering reducing the subsidies on fertilizer transport. This would affect Niger as the parts of Nigeria contiguous to Niger are the parts furthest from the ports.¹ A sharp reduction in transport subsidies is also unlikely because the north of Nigeria has relatively more political power.

¹ Nigeria is both a producer and an importer of fertilizer.

APPENDIX F

Republique du Niger
Ministere du Plan
Direction d'Evaluation et
de la Programmation des Projets

Evaluation de l'Impact Immédiat des Investissements Publics
dans le Secteur Développement Rural au Niger

Juin 1987
J. Metzel

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Evaluation de l'Impact Immédiat des Investissements Publics dans le Secteur Développement Rural au Niger

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Evaluation de l'Impact Immédiat des Investissements Publics dans le Secteur Développement Rural au Niger

I. INTRODUCTION

L'évaluation de l'impact d'investissement est un aspect nécessaire à tout programme d'investissement afin d'assurer que de tels investissements accomplissent les effets désirés de la manière la plus efficace possible. Les questions posées dans ce document ne concernent que l'impact de l'investissement initial, c'est-à-dire, l'effet immédiat sur l'économie nationale de l'injection de capital dans cette économie comme résultante des investissements faits. Cet impact est important en tant qu'impulsion fiscale pour l'économie, particulièrement pendant les périodes de croissance lente comme cela est actuellement le cas au Niger. Cet impact est énormément ressenti par la création de la demande pour des produits de l'économie qui sont des apports dans le processus d'investissement.

Cet impact n'est cependant qu'un aspect de l'impact potentiel total des investissements et peut-être le moins important à long terme. Une évaluation de l'impact d'investissement total doit évidemment envisager les revenus à long terme de l'investissement. L'impact à long terme des investissements inclut les revenus directs productifs d'un investissement, les répercussions indirectes des activités promues par l'investissement et finalement, les effets non mesurables et les effets économiques externes créés par les investissements. Ces effets à long terme sont généralement les raisons principales pour faire et justifier un investissement. Par contraste, les effets immédiats de l'investissement généralement ne justifient pas seuls la dépense occasionnée par leur production.¹ Ainsi une évaluation de la valeur économique réelle des investissements repose essentiellement sur les impacts productifs directs et indirects des investissements et non sur

¹ Cela n'est pas nécessairement vrai si l'on considère que le capital dépensé dans ces investissements est gratuit. On peut discuter qu'une grande partie du capital au Niger est gratuite parce qu'elle représente les fonds provenant de donateurs étrangers. Cependant, dans la mesure où il y a des usages productifs alternatifs de ce capital dans l'économie nationale, toute dépense en capital entraîne un coût d'opportunité. Ainsi, même le capital donateur (contributions par aide non-remboursable) devrait être évalué en termes de revenus par rapport aux options alternatives d'investissements qui sont laissées pour compte pour réaliser l'investissement en question.

les repercussions immédiates des dépenses d'investissement. L'évaluation de ces bénéfices économiques n'entre pas dans la compétence de ce rapport, mais fera l'objet d'un rapport ultérieur.

Le souci de connaître l'impact potentiel immédiat des investissements publics, sur lequel ce rapport se concentre, provient de la contribution effective des investissements publics contribuent à la "Relance Economique". La "Relance Economique" signifie l'effort d'apporter un stimulant immédiat à l'économie du Niger afin de la sortir de la récession actuelle. Cette récession qui a commencé à la chute des prix de l'uranium en 1980, a été aggravée par la sécheresse de 1984-85 et reste la cause principale de la croissance lente du Niger au cours des dernières années.

Le besoin d'effectuer un redressement économique fournit aussi le deuxième élément principal de ce rapport, le secteur du Développement Rural. Le secteur du Développement Rural a été choisi pour analyse dû à son importance primordiale dans la stratégie nationale pour revitaliser l'économie. Dans un pays où environ 88% de la population vit en régions rurales, la stratégie d'insister sur le développement rural reflète la structure actuelle de l'économie. Le plan quinquennal 1987-91 estime que, pour un PIB d'un total de 714,9 milliards CFA, l'agriculture comptera pour 192,5 milliards CFA, l'élevage pour 101,1 milliards et Forêt et Faune pour 27,7 milliards CFA. Ensemble, ceux-ci totalisent presque la moitié du produit national total. (40,1%)

Dans ce contexte, l'analyse qui suit ne considère que les investissements publics dans le développement rural pour le programme d'investissement 1987-89. Le secteur du Développement Rural tel qu'il est défini ici, est composé des sous-secteurs suivants : Agriculture, Elevage, Forêt et Faune, Micro-réalisations, Hydraulique Rurale, Etudes et Recherche, et, Formation et Enseignement.² Le Tableau 1 présente les allocations de programmation pour les investissements publics au Niger depuis 1985 et la programmation prévue jusqu'en 1991. Il paraît évident que le Programme du Développement Rural est

² Cette définition inclut trois sous-secteurs qui ne sont pas directement incorporés au Développement Rural dans la structure de programmation nationale; ce sont l'Hydraulique Rurale, Etudes et Recherche, et, Formation et Enseignement. Cependant, parce que l'orientation de ces projets se trouve dans le secteur du Développement Rural, ils ont également été inclus dans l'analyse. Pour les besoins de la discussion qui suit, les deux derniers secteurs : Etude et Recherche, et, Formation et Enseignement sont traités ensemble puisqu'ils jouent un rôle indirect et tertiaire comparable dans le développement du secteur et ont des structures de coût d'investissement semblables.

TABLEAU 1

Structure du programme des investissements de l'Etat 1987-1989

(millions de FCFA)

Programmes code	1986		1987		1988		projets nouveaux	1989		projets nouveaux		Total 1987 à 1989			
	% programmé	X programmé	% programmé	X programmé	% enveloppe programmé	X enveloppe programmé		% enveloppe programmé	X enveloppe programmé	% enveloppe programmé	X enveloppe programmé	% enveloppe programmé	X enveloppe programmé		
DEVELOPPEMENT RURAL	39.0%	31215	40.0%	36954	40.0%	41200	34561	6639	40.0%	46000	31124	14876	40.0%	124149	102639
111 agriculture	26.2%	20983	26.8%	24759	25.5%	26265	25165	1101	25.5%	29325	24270	5047	25.7%	80488	74202
112 élevage	8.0%	6406	7.8%	7199	8.0%	8240	4817	3423	8.0%	9200	2150	7050	7.7%	24616	14167 ✓
113 forêt-faune	3.4%	2735	3.8%	3498	4.0%	4120	3736	384	4.0%	4600	3845	755	3.9%	12194	11079 ✓
14 micro-réalizations	1.4%	1091	1.6%	1498	2.5%	2575	843	1732	2.5%	2875	850	2025	2.2%	3851	3191 ✓
AUTRES PROGRAMMES ECONOMIQUES	8.1%	6470	7.9%	7349	8.0%	8240	7539	701	8.0%	9200	8824	376	9.0%	23734	23712
12 mines, énergie, industrie	3.4%	2729	4.5%	4138	5.5%	5665	5767	-102	5.5%	6325	6801	-476	4.8%	14954	16706
13 tertiaire extra-administratif	4.2%	3321	2.3%	2146	1.0%	1030	403	627	1.0%	1150	771	379	1.4%	4472	3320
32 études économiques générales	0.5%	420	1.2%	1075	1.5%	1545	1369	176	1.5%	1725	1252	473	1.4%	4308	3696
TOTAL PROGRAMMES ECONOMIQUES	47.1%	37685	47.9%	44303	48.0%	49440	42100	7340	48.0%	55200	39947	15253	49.0%	148931	126351
21 éducation/formation	5.7%	4541	5.3%	4877	7.0%	7210	6809	401	7.0%	8050	6509	1541	6.4%	19947	18176
221 santé	5.9%	4717	4.3%	3987	4.0%	4120	4146	-26	4.0%	4600	3766	834	4.1%	12741	11893
222 hydraulique	11.3%	9075	14.7%	13361	13.5%	13905	13993	-88	13.5%	15525	13103	2422	13.7%	43119	40657 ✓
223 urbanisme-habitat-assain	4.7%	3777	3.1%	2863	3.5%	3605	3019	586	4.0%	4600	4872	-272	3.5%	10966	10754
23 animation du développement	0.9%	690	0.8%	764	1.0%	1030	1075	-45	0.5%	575	128	447	0.8%	2407	1966
TOTAL PROGRAMMES SOCIAUX	28.5%	22900	28.2%	26052	29.0%	29870	29041	829	29.0%	33350	23378	4972	29.7%	89180	83471
311 routes et ponts	10.5%	8406	15.8%	14626	19.0%	19570	20273	-703	19.0%	21850	17621	4229	17.9%	55696	52521
312 postes et télécommunications	4.5%	3594	2.0%	1894	1.0%	1030	443	587	1.0%	1150	91	1059	1.3%	4189	2428
TOTAL INFRASTRUCTURES ECONOMIQUES	15.0%	12000	17.9%	16520	20.0%	20600	20716	-116	20.0%	23000	17712	5288	19.3%	59895	54949
TOTAL PROG. ACCOMPAGNEMENT	9.4%	7515	6.1%	5624	3.0%	3090	2930	160	3.0%	3450	1630	1820	4.0%	12503	10185
TOTAL GENERAL	100.0%	80000	100.0%	92500	100.0%	103000	94788	8212	100.0%	115000	87667	27333	100.0%	318500 ✓	274955

devenu le secteur le plus privilégié des investissements publics et l'on s'attend à ce qu'il représente 40% du budget total des investissements publics pendant la période 1987-89. Ce pourcentage s'est accru considérablement depuis la période précédente 1979-84 quand le Développement Rural n'a reçu que 19% des fonds totaux d'investissement.³ L'Hydraulique Rurale est incluse ailleurs en sous-programme, séparé sous programmes sociaux. Elle reçoit environ 12 % du budget national et constitue une priorité.

Parmi les sous-secteurs du Développement Rural, L'Agriculture a reçu de façon constante la plus grande portion (26 %) des ressources financières. L'Élevage a pris environ 8% et forêt et faune environ 4%. Les micro-réalisations, une nouvelle approche depuis 1984, se sont élevées à 1.5 % du budget.

II. METHODE ET DONNEES

Pour examiner l'impact immédiat prévu du programme d'investissement pour le secteur du Développement Rural, la présente analyse suivante commence par une décomposition des investissements prévus en sous-secteurs et catégories de coût. Les montants de chaque type d'investissement qui sont définis par ces catégories de coût sont alors appliqués au tableau d'entrée-sortie de l'économie afin d'évaluer le niveau de la demande réelle générée par ces investissements, la proportion de la demande qui sera satisfaite par la production au sein de l'économie locale et les répercussions sur les revenus gouvernementaux, l'emploi local et la balance nationale des paiements.

Les données pour ces analyses ont été tirées du "Dossier Standard de Programmation de 1986" qui est un outil de collecte d'informations pour chaque projet pour l'exercice de Programmation d'Investissement 1987-89. Le Tableau Entrée-Sortie (TES) tire sa structure et ses coefficients d'un tableau réalisé par la DAEP en 1981.

Ces sources contiennent une série d'erreurs et d'omissions dont le lecteur devrait être conscient lorsqu'il interprète les résultats des analyses. Il y a dans cette analyse particulièrement cinq sources d'erreurs :

- 1) Les analyses d'investissements dans chaque secteur sont basées sur une extrapolation à partir d'un nombre limité de dossiers standards parce que de nombreux projets

³ Plan Quinquennal 1987-91. Version Provisoire, République du Niger, p. 84.

d'investissement n'ont pas encore de dossier complet. Donc, les données sectorielles chiffrées qui en dérivent, dépendent de la représentativité des projets qui ont des dossiers complets.

- 2) Les renseignements concernant les catégories de coût ne sont pas toujours consistants entre les différents dossiers standards. Par exemple, les définitions de catégories de coût varient selon les projets. Ainsi des coûts inclus sous "Fonctionnement" dans un dossier, peuvent être inclus sous "Intrants" dans un autre. . . Là où il a été possible de corriger ces erreurs, il n'y avait cependant pas d'informations suffisantes pour vérifier leur cohérence.
- 3) Dans chaque dossier standard, il y a des incohérences internes et des erreurs. Souvent, par exemple la répartition des investissements par activités ne correspondait pas aux celles des investissements par catégorie de coût.
- 4) Dans la plupart des cas, les montants d'investissement programmés dans les Dossiers Standards ont été changés pendant les arbitrages finals du programme d'investissement. Les chiffres d'investissement retenus par l'analyse sont ceux du document final du programme d'investissement. Pour arriver à ces chiffres, les données dans les Dossiers ont été ajustées proportionnellement de sorte que leurs totaux égalent les chiffres finals retenus.
- 5) Là où l'information manquait, un nombre d'hypothèses ont été retenues afin de tirer les conclusions pour l'évaluation d'impact. La validité de ces hypothèses est souvent discutable. Par exemple, les calculs de génération d'emploi local reposent sur les estimations des pourcentages de l'emploi local par catégorie prises dans la répartition globale d'emploi national. Ces coefficients devraient être considérés uniquement comme indicatifs.

III. REPARTITION DES INVESTISSEMENTS DE DEVELOPPEMENT RURAL

La répartition par catégories de coûts fournit une comparaison des types d'investissement faits par chaque sous-secteur du Programme de Développement Rural. Cela permettra alors une estimation de l'impact secondaire des investissements dans chaque sous-secteur.

Les catégories de coût retenues pour cette répartition correspondent à celles fournies dans les Dossiers Standards, bien que dans plusieurs cas, elles ont été rassemblées soit à cause de

la confusion dans les dossiers sur la distinction entre des catégories étroitement associées, soit pour englober des catégories qui n'étaient pas mentionnées dans les dossiers. Les catégories retenues sont les suivantes :

<u>Catégorie</u>	<u>Rubriques Incluses</u>
Infrastructure :	- Génie Civil - Travaux Publics - Routes et Ponts - Travaux Divers
Intrants :	- Equipement et autre matériel. - Véhicules et autre matériel.
Fonctionnement :	- Fonctionnement
Personnel :	- Personnel - Formation des Cadres
Assistance Technique :	- Assistance technique - Consultants à court terme - Etudes et Evaluations
Divers et Imprévus	- Divers et Imprévus

Le tableau 2 présente les allocations des fonds par catégorie et sous-secteur pour les catégories ci-dessus, et le graphique A montre le pourcentage de l'investissement dans chaque sous-secteur qui est réservé à chaque catégorie de dépense.

Les investissements en infrastructure constituent la plus grande portion de tous les investissements globaux en Développement Rural (38%). La plus haute proportion en Infrastructure est en Hydraulique Rurale (58%). L'Agriculture, le sous-secteur pesant le plus lourd, est, pour cette catégorie de coût, juste dans la moyenne globale avec 38%. D'autre part, Forêt et Faune (13%), Recherche, Etudes, Formation et Enseignement (21%) et Ressources Animales (22%) sont les consommateurs les moins intenses en investissement d'infrastructure.

Le deuxième plus grand consommateur de fonds d'investissement est le fonctionnement (19%). Cette catégorie englobe tous les coûts d'opération du projet. Généralement, cette catégorie inclut le coût du carburant pour le transport, les fournitures et le mobilier de bureau et les coûts d'entretien et de réparation des véhicules et de l'équipement du projet. Parmi les sous-secteurs, cette catégorie est la plus grande consommatrice relative de fonds dans les sous-secteurs études, recherche, formation et enseignement (28%). Cela n'est pas étonnant puisque les activités dans ce secteur utilisent

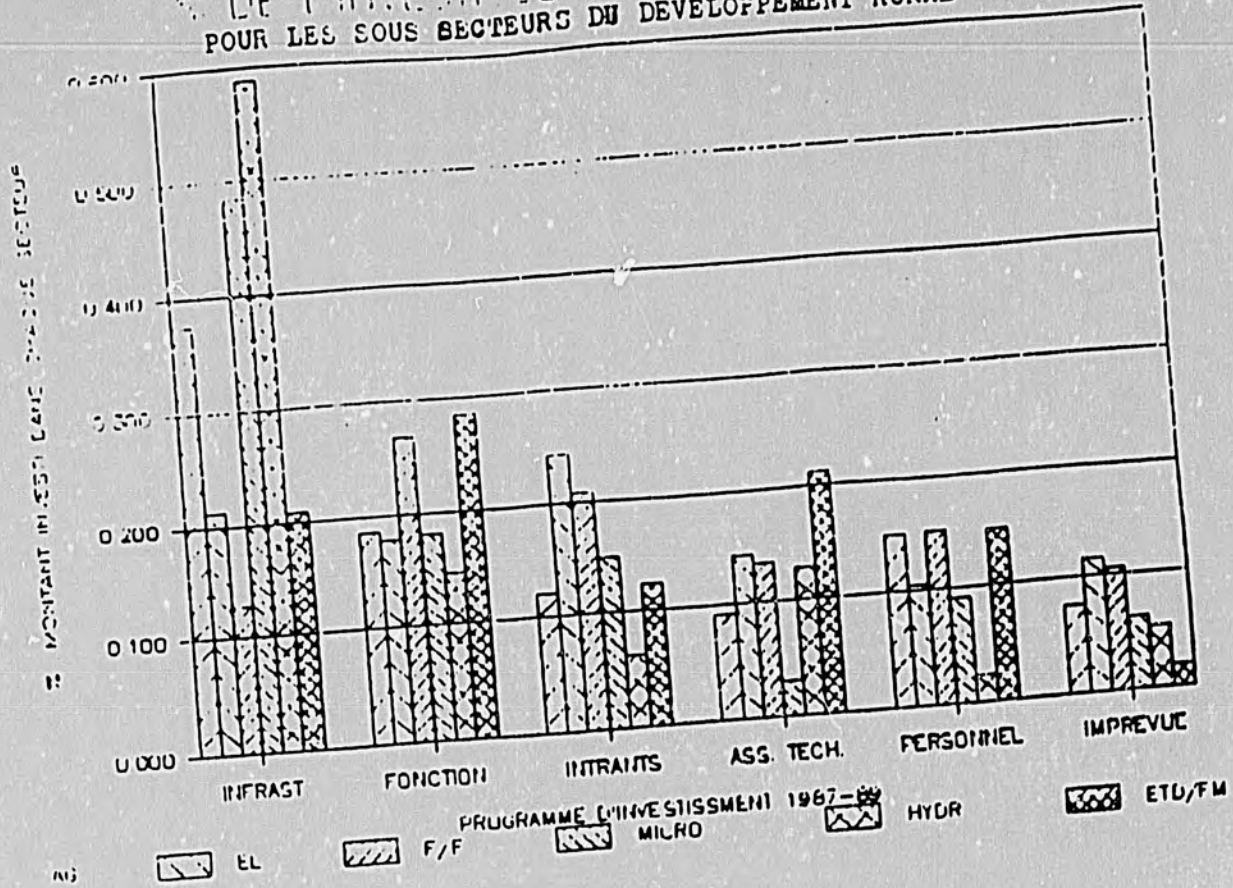
TABLEAU 2:

REPARTITION DES INVESTISSEMENTS DANS LE DEVELOPPEMENT RURAL PAR CATEGORIE DE COUT
Programme d'investissement 1987-1989

	INFRASTRUCTURE		FONCTIONNEMENT		INTRANTS		ASSIST. TECH.		PERSONNEL NIGERIEEN		IMPREVUE, DIVERS		TOTAL	
	montant	%	montant	%	montant	%	montant	%	montant	%	montant	%	montant	%
AGRICULTURE	27.553.099	55%	13.696.682	55%	8.922.596	51%	6.655.567	45%	11.170.067	70%	5.509.605	55%	73.507.615	5
projets productivité	2.714.179	5%	5.356.414	21%	2.016.915	12%	1.156.204	8%	2.762.141	17%	2.490.820	25%	16.436.673	1
couverture nationale	339.793	1%	5.917.114	24%	2.290.523	13%	2.415.593	16%	1.583.650	10%	1.293.751	14%	13.940.424	1
couverture local	2.072.612	6%	1.410.991	6%	1.032.374	6%	1.048.785	7%	574.234	4%	601.369	6%	7.540.965	1
amenagements hydroagri. /	21.626.515	43%	1.012.162	4%	3.582.784	21%	2.034.985	14%	6.250.042	39%	1.023.065	10%	35.529.553	2
ELEVAGE	3.020.009	6%	2.531.978	10%	3.435.338	20%	2.041.999	14%	1.490.297	9%	1.647.460	17%	14.167.082	✓
FORÊT ET FAUNE	1.416.139	3%	2.972.762	12%	2.302.333	13%	1.509.557	10%	1.704.177	11%	1.174.054	12%	11.079.023	✓
MICRO-REALISATIONS	1.547.244	3%	560.216	2%	483.514	3%	96.703	1%	290.108	2%	193.405	2%	3.191.190	✓
HYDRAULIQUE RURALE	15.273.966	31%	3.784.161	15%	1.618.754	9%	3.347.100	23%	591.343	4%	1.339.360	13%	25.955.285	2
ETUDE/POMAT/ENSEIG/RECH.	1.089.523	2%	1.478.190	6%	642.989	4%	1.099.125	7%	779.519	5%	94.775	1%	5.184.120	
TOTAL	49.639.980	100%	25.043.989	100%	17.405.525	100%	14.750.051	100%	16.025.510	100%	9.959.260	100%	133.084.315	10

Graphique A:

DE L'INVESTISSEMENT PAR CATEGORIE
 POUR LES SOUS SECTEURS DU DEVELOPPEMENT RURAL



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généralement et de manière intensive la main d'oeuvre (voir ci-dessous), qui est directement liée au fonctionnement. Les projets de Forêt et Faune ont presque un niveau aussi élevé de dépenses (26%). Tous les autres sous-secteurs (Agriculture, Elevage, Micro-réalisations et Hydraulique Rurale) ont pour cette catégorie un niveau de dépense sensiblement plus bas soit entre 15 et 18%.

Les intrants et autre équipement couvrent des rubriques spécifiquement associées au projet et nécessaires aux investissements effectués par ce dernier. Ceux-ci ne doivent pas être confondus avec le fonctionnement qui couvre les coûts d'opération des activités du personnel du projet, et non les coûts d'opération (coûts variables annuelles) d'investissements à long terme qui sont faits. Les Intrants et l'équipement compte pour à peu près 13% du budget du Développement Rural. Ce taux est plus de 20% pour Forêt et Faune et Elevage tandis que tous les autres secteurs tombent au-dessous de 15%. Il nous faut cependant remarquer ici que l'Hydraulique Rurale, avec une utilisation très basse d'intrants, a de fortes chances d'être faussée, car en général, les coûts d'intrants et d'équipement pour la construction de puits sont tous réunis dans les coûts de construction et sont donc inclus sous infrastructure. Ceci explique aussi la portion très élevée d'infrastructure dans le sous-secteur Hydraulique Rurale.

Le coût du personnel Nigérien du projet compte pour 12% du budget global du Développement Rural. De toutes les catégories de coût, le coût du personnel fluctue le moins parmi les secteurs, restant entre 9 et 15% des coûts d'investissement dans tous les secteurs, sauf pour l'Hydraulique Rurale. Ici encore, la tendance à assembler tous les coûts concernant la construction des puits, sous infrastructure peut fausser ces chiffres.

L'Assistance Technique compte pour 11% de la consommation des fonds publics. Comme on peut s'y attendre, les coûts relatifs les plus élevés pour l'Assistance Technique sont pour les Etudes, la Recherche, la Formation et l'Enseignement. Ceci est en partie dû au fait du manque de Nigériens ayant les qualifications nécessaires dans ces activités. Tous les autres sous-secteurs, sauf les micro-réalisations ont dépensé environ 9 à 15% pour l'Assistance Technique, ce qui correspond à peu près à la dépense pour le personnel Nigérien.

En dernier lieu, "Divers et Imprévus" compte environ pour 8% du budget. Ces chiffres sont cependant très bas car beaucoup de projets n'ont rien indiqué pour cette catégorie. Ils ont plutôt inclus un fond de prévoyance pour les impondérables dans chacune des autres catégories de coût.

IV.

ANALYSE DE L'IMPACT IMMEDIAT DE L'INVESTISSEMENT
DANS LE SECTEUR DEVELOPPEMENT RURAL

L'analyse des effets présentée ci-dessous étudie cinq impacts immédiats des investissements planifiés pour la période 1987 à 1989 dans le secteur du Développement Rural. Ce sont : la création de la demande dans l'économie locale, l'effet sur le FIB, l'effet sur la trésorerie du Gouvernement, la création d'emplois locaux et enfin, la perte de la demande aux économies étrangères.

IV.A L'Effet "Multiplicateur" et la Création de la
Demande Locale

L'effet initial le plus important des investissements est la demande secondaire créée dans l'économie par les dépenses occasionnées par l'investissement. Chaque franc CFA dépensé par un investisseur va à un certain agent économique qui fournit l'article pour lequel la dépense est faite. Si la transaction est faite au Niger, la valeur de l'achat reste dans l'économie locale et est, soit mise en épargne, soit utilisée pour de nouvelles dépenses. La portion re-dépensée dans l'économie locale est ensuite reçue par un autre agent qui, encore une fois, réutilise une partie de l'argent. De cette manière, l'investissement initial crée une série de demandes secondaires qui représentent l'effet "multiplicateur" de la demande de l'investissement initial.

L'effet multiplicateur peut être réparti en deux composantes. Premièrement, la demande faite par l'investissement initial pour un produit, engendre une consommation des intrants qui vont à la création de ce produit et par conséquent crée une demande "intermédiaire" pour ces intrants. Cette composante du multiplicateur est donc appelée la "consommation intermédiaire" dans l'analyse qui suit. Deuxièmement, le producteur de chaque produit demandé soit par l'investissement initial, soit à travers la consommation intermédiaire gagne une valeur ajoutée sur ces produits. Cette valeur ajoutée inclut son salaire et les bénéfices. Ces gains sont alors épargnés ou utilisés par le producteur. La portion qui va à sa famille et lui-même consomment représente "l'effet de la consommation finale" et crée une demande supplémentaire pour les produits de l'économie.

Dans le cas des investissements au Niger, par exemple, l'économie locale fournit typiquement quelques matériaux bruts de construction (sable, gravier, etc.), des petits produits manufacturés et des services commerciaux comme composantes de la consommation intermédiaire pour tout investissement. En plus, le personnel du projet d'investissement dépense une partie de son salaire en logement, eau, et électricité, et, certains produits alimentaires pour la consommation finale.

Afin d'évaluer la demande totale générée par ce processus, l'analyse qui suit applique les résultats de la décomposition des investissements fournie à la section précédente à un Tableau d'Entrée-Sortie de l'économie. Le Tableau des Entrées et Sorties est une matrice composée de chacun des secteurs de production et de consommation de l'économie. Le coefficient d'une quelconque cellule de la matrice fournit la valeur des intrants du secteur représenté par cette ligne, intrants qui sont nécessaires pour l'extrant générée par le secteur représenté par la colonne dans laquelle la cellule se trouve. (Voir Annexe A pour détails). Cette matrice permet de prévoir la demande indirecte faite aux autres secteurs et résultant d'une demande pour la sortie d'un secteur donné.

Dans le cas présent, le Tableau 2 présente les éléments pour lesquels les fonds d'investissement seront dépensés pour le Développement rural. Ces articles représentent la demande supplémentaire que les investissements créeront dans l'économie. (Cette demande a été affectée dans le Tableau des Entrées et Sorties comme figurant sous la colonne "Effet des Investissements Initiaux" dans le tableau récapitulatif de l'Annex A). Du fait que les catégories de coût des investissements tirées de la section précédente ne correspondent pas exactement aux divisions sectorielles du Tableau des Entrées et Sorties, un certain nombre d'hypothèses ont été faites. Tout investissement infrastructurel est supposé être traduit en demande pour le secteur "BPT moderne". Similairement, "Matériel et Intrants" est supposé correspondre au secteur "Matériel de construction" et "Travaux divers" à celui des "Services aux entreprises". Enfin, "Personnel", "Assistance Technique", "Véhicules et Matériel Roulant", "Fonctionnement" et "Imprévues" sont tous supposés être groupés sous le secteur "Services Non-Commercial et Administration". Cette hypothèse est basée sur le fait que les coûts de tous les projets d'investissements vont couvrir l'administration du secteur public du projet. Les activités du secteur public sont représentées dans le Tableau des Entrées et Sorties par les Services Non-Commerciaux et Administration.

Le Tableau 3 résume la consommation intermédiaire des investissements pour chacun des sous-secteurs du Programme d'Investissement du Développement Rural. Chaque effet est présenté comme pourcentage de l'investissement initial dans le secteur approprié afin de permettre les comparaisons entre secteurs. (Les calculs détaillés d'où ce tableau est tiré, sont fournis dans l'Annexe A). L'effet total de l'investissement est résumé au Tableau 4, qui répartit cet effet en consommation intermédiaire et en consommation finale. Les valeurs pour chaque catégorie, leur pourcentage d'effet total et leur pourcentage d'investissement initial sont comparés.

Les Tableaux 3 et 4 donnent un nombre d'aperçus de l'impact

TABLEAU 3

LES EFFETS INDIRECTS DES INVESTISSEMENTS SUR L'ECONOMIE
EN POURCENTAGE DE L'INVESTISSEMENT INITIAL DANS CHAQUE SOUS-SECTEUR

	CONSOMMATION INTERMEDIAIRE PAR SOUS-SECTEUR DE DEVELOPPEMENT RURAL						EFFET TOTAL INTER- MEDIATRE
	AGRICUL- TURE	ELEVAGE	FORET ET FAUNE	HYDRAUL RURALE	ETUDE, RECH FORM/ENSEIG	MICRO- REALIS	
CONSOMMATION INTERM. LOCALE	13.97%	13.27%	12.55%	17.60%	13.00%	17.45%	14.44%
CONSOM. INTERM. IMPORTEE	27.96%	25.34%	24.31%	33.69%	25.92%	27.75%	28.41%
TRANSFERTS SERVICES NON-COMMERCI	-3.84%	-4.35%	-5.26%	-1.92%	-5.58%	-2.45%	-3.71%
MARGES NETTES SUR LA PRODUCTION	0.23%	0.87%	0.68%	-0.14%	0.23%	0.43%	0.27%
VALEUR AJOUTEE SUR LA PROD.	57.10%	54.22%	59.11%	55.34%	62.16%	50.54%	56.85%
VALEUR IMPORTATIONS	13.96%	15.62%	14.40%	8.73%	12.65%	18.13%	13.15%
MARGES SUR LES IMPORTATIONS	4.47%	6.13%	6.97%	3.00%	4.42%	5.40%	4.80%
LENGUEUR TOTALE GENEREE	113.75%	113.08%	112.35%	117.30%	112.79%	113.23%	114.30%

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TABLEAU 4

LES EFFETS TOTALS INDIRECTS DES INVESTISSEMENTS SUR L'ECONOMIE
EN MONTANT TOTAL ET EN POURCENTAGE DE L'INVESTISSEMENT INITIAL

	(A) CONSOMMATIONS INTERMEDIAIRES			(B) CONSOMMATION FINALE			EFFET TOTAL DE LA DEMANDE GENEREE		
	MONTANT	% DU	% INVESTIS.	MONTANT	% DU	% INVESTIS.	MONTANT	% DU	% INVESTIS.
		TOTAL (A)	INITIAL		TOTAL (B)	INITIAL		TOTAL (B)	INITIAL
CONSOMMATION INTERM. LOCALE	19213	12.64%	14.44%	92911	50.73%	69.81%	112124	33.46%	84.25%
CONSOH. INTERM. IMPORTEE	37807	24.88%	28.41%	19895	10.85%	14.95%	57702	17.22%	43.36%
TRANSFERTS SERVICES NON-COMMERCI	-4936	-3.25%	-3.71%	134	0.07%	0.10%	-4802	-1.43%	-3.51%
MARGES NETTES SUR LA PRODUCTION	353	0.23%	0.27%	10150	5.54%	7.63%	10503	3.13%	7.89%
VALEUR AJOUTEE SUR LA PROD.	75661	49.78%	56.85%	51636	28.19%	38.80%	127297	37.98%	95.65%
VALEUR IMPORTATIONS	17494	11.51%	13.15%	6024	3.29%	4.53%	23518	7.02%	17.67%
MARGES SUR LES IMPORTATIONS	6388	4.20%	4.90%	2413	1.32%	1.81%	8802	2.63%	6.81%
DEMANDE TOTALE GENEREE	151981	100.00%	114.20%	183163	100.00%	137.63%	335144	100.00%	251.83%

des investissements planifiés pour le Développement Rural sur la création de la demande locale. Tout d'abord, les investissements initiaux de 133 milliards CFA sur les trois ans du programme engendreront une demande d'environ 152 milliards CFA pour des marchandises et des services intermédiaires. Ceci représente 114% de l'investissement initial. Les investissements agricoles seront évidemment le plus grand contributeur à cette demande à cause de leur taille. Cependant, par franc CFA investi, le secteur de l'Hydraulique Rurale générera la plus haute demande indirecte pour la production intermédiaire (117% des investissements) tandis que les taux de tous les autres secteurs se situent entre 112 et 114%. Ces différences sont minimales généralement parce que les investissements de tous les secteurs sont approximativement les mêmes quant à la composition des intrants. L'Hydraulique Rurale se détache du reste à cause de son investissement très élevé en infrastructure.

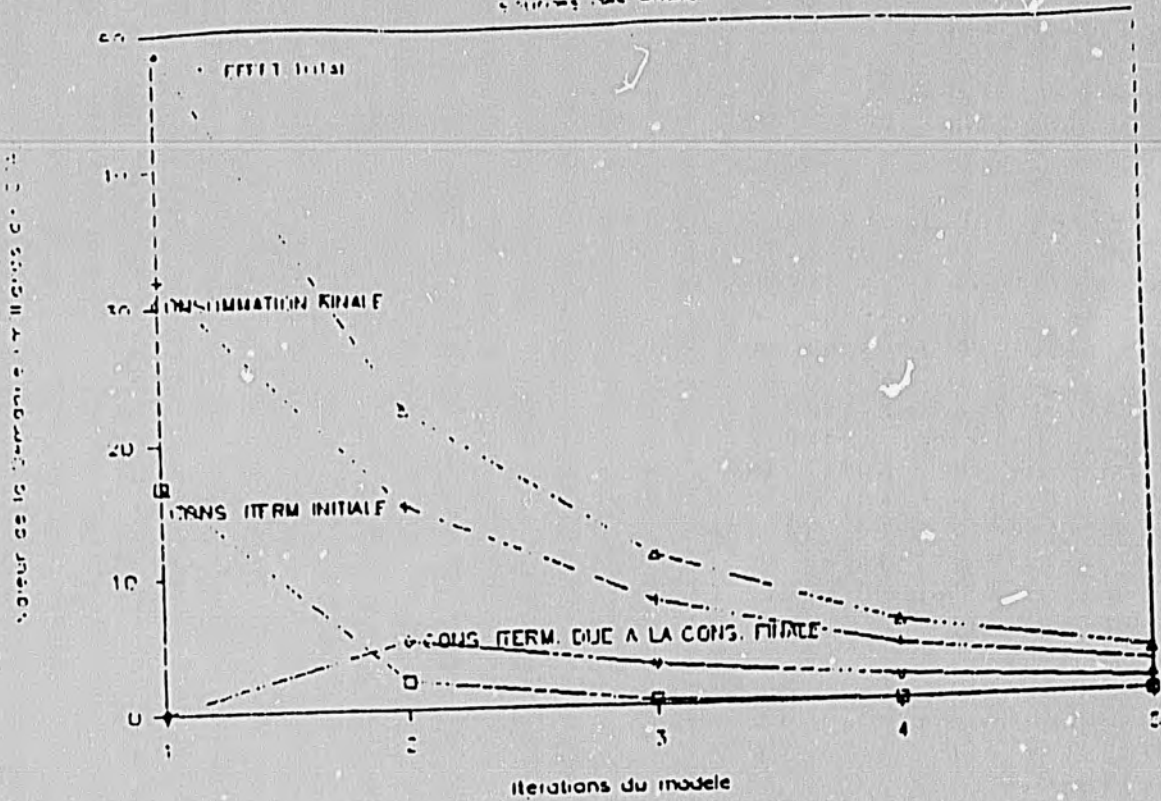
L'impact sur la consommation finale résultant du revenu personnel gagné par les producteurs est encore plus grand. Les calculs de la consommation finale sont présentés pour l'ensemble du secteur du Développement Rural, parce que le TES traite la consommation finale de revenu de la même manière que tous les sous-secteurs. Le Tableau 4 suggère que la demande en consommation finale équivalente à 138% de l'investissement initial est générée par l'investissement. Combinée avec la demande intermédiaire, l'effet total égale 252% de l'investissement initial. En d'autres termes, chaque franc cfa dépensé en investissements dans le développement rural, crée 2.5 FCFA de demande secondaire pour la consommation.

De cette demande générée, environ la moitié (159 milliards de CFA) va aux intrants intermédiaires de la production, moitié dont une partie est importée et l'autre partie d'origine locale. Globalement, environ deux tiers des intrants intermédiaires sont fournis par l'économie intérieure et un tiers par les intrants importés. Il y a cependant une distinction très nette entre la consommation intermédiaire et la consommation finale sur ce aspect (voir Graphique B). La consommation intermédiaire nécessite que presque deux tiers de ses intrants proviennent de l'étranger, tandis que 82% des intrants de la consommation finale sont obtenus localement. Ceci est dû au fait que la consommation finale dépend en grande partie des secteurs d'agriculture et d'élevage locaux, tandis que la consommation intermédiaire dépend énormément des secteurs de Services aux Entreprises, BPT Moderne et des Transports Modernes qui nécessitent d'importants composants importés.

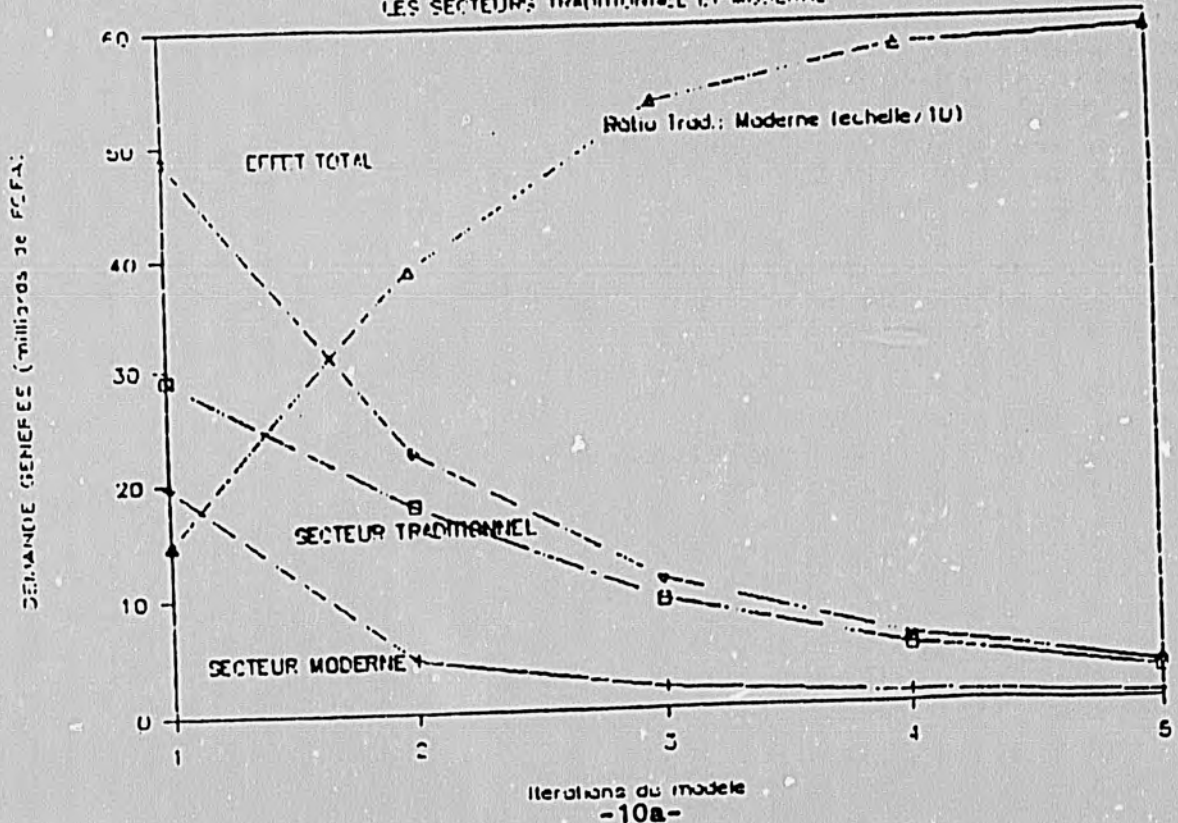
Une division de la demande entre les secteurs moderne et traditionnel démontre une rupture identique entre la demande de consommation intermédiaire et finale. Si l'on combine toutes les activités du "secteur moderne", elles représentent 96% de la demande locale totale en consommation intermédiaire, mais

Graphique B:

Evolution de l'impact indirect des
changements de prix



Graphique C: REPARTITION DE LA DEMANDE GENEREE ENTRE
LES SECTEURS TRADITIONNEL ET MODERNE



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seulement 14% de la demande locale en consommation finale. Ainsi, le Graphique C illustre que la demande pour les produits traditionnels croît avec le temps avec chaque itération du TES, pendant que les effets de l'investissement se changent de plus en plus en demande finale.

IV B. Effet sur le Produit Intérieur Brut

Approximativement 37,9% de la demande totale générée (127 milliards CFA) représentent la valeur ajoutée par le processus de production (voir Tableau 4). La valeur ajoutée est composée de trois éléments. D'abord, 51,2 milliards CFA représentent les salaires et les avantages en nature des producteurs dans l'économie. Mais sur cette somme, 19 milliards CFA représentent les salaires du personnel expatrié au sein de l'économie. Un second élément au montant de 3,8 milliards CFA va au gouvernement sous forme d'impôts nets (à savoir, impôts moins subventions). Finalement, 72,2 milliards CFA représentent les bénéfices bruts des activités de production générées par les investissements initiaux effectués.

La comparaison de la valeur ajoutée des effets de la consommation intermédiaire dans les sous-secteurs du développement rural (Tableau 3) montre que les investissements en Hydraulique Rurale (62,1%) produisent la plus haute valeur ajoutée, tandis que les micro-réalisations et l'élevage ont la valeur ajoutée la moins élevée. Cette dichotomie est due en grande partie à la portion relative des investissements en infrastructures dans chaque sous-secteur, puisque les investissements en infrastructure ont une haute valeur ajoutée par rapport aux autres secteurs économiques.

En termes macro-économiques, la valeur ajoutée représente le supplément au PIB fait par l'investissement et par conséquent le supplément net à l'économie. Comme le Tableau 4 l'indique, la valeur ajoutée due à la consommation intermédiaire représente 56% de la valeur de l'investissement initial et la génération de la consommation finale contribue une valeur d'investissement initial de 33,8% supplémentaire à la valeur ajoutée. L'effet combiné donne à penser que pour chaque franc CFA investi dans le Développement Rural, 0,96 FCFA est ajouté au PIB grâce à la génération de demande secondaire due à l'investissement. Cet effet apporte une contribution importante à la valeur économique des investissements, bien qu'en soi, le résultat ne justifie pas l'investissement effectué, car la valeur ajoutée reste inférieure à l'investissement. Comme déjà mentionnée dans l'introduction, la plus grande valeur des investissements réside dans leurs rendements à long terme plutôt que dans les effets secondaires de l'investissement même. Il faut aussi ajouter que puisque tous les investissements dans chaque composante du Tableau des Entrées et Sorties produisent le même impact

secondaire sur l'économie, ceux-ci ne fournissent aucun critère permettant de choisir entre les différents investissements dans un même secteur. L'évaluation des projets individuels doit en conséquence être basée sur leurs rendements et sur les bénéfices non-quantifiables qu'ils génèrent et non pas sur les effets initiaux secondaires de l'investissement.

Dans l'ensemble, le supplément total prévu au PIB est de 127,3 milliards CFA sur le période de trois ans (1987-1989), ou environ 42 milliards CFA par investissement annuel. Le PIB total du Niger en 1987 devrait être de l'ordre d'environ 771,9 milliards CFA et donc l'effet des investissements en développement rural (non ajustés pour tenir compte des différences annuelles du programme d'investissement) représentera environ 5,4% du PIB annuel. Cet estimé paraît raisonnable; mais il doit être pris à titre indicatif seulement car l'auteur ne dispose pas d'autres estimations comparables permettant de valider ce résultat.

IV C. Effet sur les Revenus Gouvernementaux

Les investissements indiqués ci-dessus apportent des revenus au Gouvernement par les impôts et taxes sur les intrants de l'investissement et par les impôts sur le revenu pour les gains salariaux. Les subventions sur les intrants de l'investissement produisent, bien sûr, l'effet contraire. Le Tableau 5 présente une division des revenus gouvernementaux générés par la consommation intermédiaire de tous les sous-secteurs du Développement Rural.* Le tableau montre quels secteurs génèrent ou non des revenus indirects suffisants pouvant couvrir l'investissement gouvernemental initial. Seuls l'agriculture et l'Hydraulique Rurale semblent produire un effet global positif net. Le degré de recouvrement des dépenses fournit par chaque secteur est une fonction inverse de la proportion de la contribution au trésor dans l'investissement initial et directement liée au montant relatif de la consommation intermédiaire générée par les investissements dans chaque secteur.

Dans l'ensemble, les résultats du Tableau 5 démontrent que le Gouvernement gagnera 3,8 milliards CFA grâce aux impôts générés et 2,1 milliards grâce aux taxes d'importation. Pris ensemble, ces montants représentent un transfert pour le gouvernement de 5,9 milliards CFA. Par comparaison, la contribution de la trésorerie au budget d'investissement pour le développement rural sur les trois années, totalisera environ 6,6

* Les effets de la demande finale n'ont pas été inclus parce qu'ils sont impossibles à répartir entre les secteurs dans le TES.

TABLEAU 5

EFFET DES IMPACTS INDIRECTS SUR LE TRESOR DU GOUVERNEMENT

	CONSUMMATIONS INTERMEDIARES						EFFET INITIAL INTER- MEDIAIRE	EFFET DE LA CONSOMMATION FINALE	EFFET TOTAL SUR L'ECONOMIE
	AGRICUL- TURE	ELEVAGE	FORET ET FAUNE	HYDRAUL RURALE	ETUDE/RECH FORM/ENSEIG	MICRO- REALIS			
DEPENSES (volet trésor) - - -	1982	655	1738	602	211	1384	6571	- -	6571
RECETTES - - - - -									
IMPOTS INDIRECT NET	1725	243	126	1017	75	88	3274	580	3854
- IMPOTS INDIRECTS	1841	260	134	1098	79	94	3506	612	4119
- SUBVENTIONS	-116	-18	-8	-81	-4	-6	-232	-32	-264
DROITS DE TAXES	799	271	183	200	56	41	1550	600	2150
RECETTES TOTALES DU TRESOR	2524	514	309	1217	131	129	4824	1181	6005
EFFET NET SUR LE TRESOR	542	-141	-1429	616	-80	-1255	-1747	- -	-566

Les dépenses totales du gouvernement pour le programme Dév. Rural 1987-1989 sont basées sur la contribution du trésor en 1987 augmentée annuellement par 11 % pour refléter l'accroissement du budget. Notez que les dépenses considérées ici sont seulement les dépenses immédiates de l'investissement.

milliards CFA.⁵ Bien sûr, un investissement supplémentaire en Développement Rural de 55 milliards CFA proviendra d'emprunts publics ce qui occasionnera des futurs coûts pour le Gouvernement puis qu'il seront remboursés. Ces dettes ne sont pas incluses dans l'évaluation de l'impact immédiat parce qu'elles sont remboursées à très long terme. Une telle analyse exigerait aussi une estimation des revenus gouvernementaux qui résulteraient des rendements à long terme que ces investissements sont supposés créer. Cet effet principal n'est pas calculé ici et donc un bilan financier net du Gouvernement ne peut être donné à partir de cette analyse partielle.

L'analyse suggère cependant qu'environ 89% de la contribution gouvernementale directe aux investissements du développement rural (5.9 sur 6.6 milliards CFA) seront récupérés par les impôts indirects et les taxes sur l'activité économique générée entourant le processus d'investissement. Si on les divise également entre les trois années d'investissement, ces gains indirects représentent environ 2.2% des revenus gouvernementaux annuels totaux.⁶

IV D. La Création d'Emploi

Peut-être que l'effet immédiat des investissements le plus marqué est l'emploi qu'il génère pendant la période d'investissement. Cet effet inclut d'abord, l'emploi de personnes par le projet pour effectuer l'investissement en question. Les professionnels du projet, le personnel auxiliaire et les manoeuvres du projet tombent tous dans cette catégorie. En général, tous ces gens ne sont employés que pendant la phase d'investissement du projet et doivent chercher un autre travail ailleurs dès que les investissements ont été faits. Donc, cette création d'emploi est provisoire et à court terme et se situe en grande partie dans le secteur public.

Une source d'emploi supplémentaire est créée par la demande secondaire de marchandises et de services au sein de l'économie générée par l'investissement. Cet effet sur l'emploi peut se manifester soit par une utilisation plus maximale des

⁵ Programme des Investissements de l'Etat 1987-1989, Septembre 1986, pp. 10-14.

⁶ Cet estimé prends pour hypothèse que ces revenus seront collectés les mêmes années que les investissements. Bien sûr, cela ne sera pas le cas dû aux retards dans le processus d'effet secondaire. Ce détail est ignoré puisque les revenus des investissements des années précédentes sont supposés pallier ce retard. L'estimé du revenu gouvernemental total (87,9 milliards CFA pour 1986) est tiré de : "Etudes et Conjoncture" DAEP/Plan, Août 1986, p.23.

travailleurs déjà embauchés, soit en embauchant d'autres personnes pour répondre à la demande croissante. Cet effet se produit presque entièrement dans le secteur privé, de plus en plus dans le secteur traditionnel et de moins en moins dans le secteur moderne alors que la cause qui génère la demande change de demande intermédiaire à demande finale.

Le Tableau 6 ci-dessous fournit des estimations du nombre de personne-années d'emplois qui seront créés par les investissements prévus dans le secteur Développement Rural ces trois prochaines années. Ces estimations sont basées sur le montant de la valeur ajoutée qui sera versé en salaires locaux comme résultat de ces investissements. (Voir la ligne "Salaires Locaux" au Tableau A.1, Annex A). La répartition de ce montant total par secteur, multiplié par le pourcentage de la population des diverses classes d'emploi et le salaire moyen annuel de chaque classe, fournit le nombre approximatif d'emplois par personne-année par catégorie indiquée ci-dessous.

Ces estimés incluent l'emploi par les projets eux-mêmes, et l'emploi indirect généré par les activités des projets. Ils excluent, cependant, le personnel des ministères techniques ou des autres organisations supervisant les projets, puisque ces postes existeraient sans tenir compte de l'investissement en question. Les positions d'assistance technique des projets sont aussi exclues de ces calculs parce que ces postes sont occupés par des expatriés et donc ils ne représentent pas d'emplois supplémentaires pour les Nigériens.

Le Tableau 6 suggère qu'un total d'emplois d'environ 40.700 personnes-années seront créés par les investissements en Développement Rural pour les trois prochaines années, (approximativement 13.500 emplois par année). Dû aux hypothèses du TES (voir notes en bas du Tableau 6) environ 9.3% de ces postes sont attribués aux professionnels, 19.1% aux techniciens et ouvriers qualifiés, 47.9% aux ouvriers spécialisés et employés des entreprises. Le reste (23.7%) va aux manoeuvres et travailleurs non formés.

Telle qu'anticipé, le nombre total de personnes-années d'emplois générés par chaque sous-secteur reflète l'importance de montant d'investissement dans ce sous-secteur. Ainsi l'Agriculture génère le plus d'emplois dans l'ensemble, tandis que les micro-réalisations en génèrent le moins. Cependant, une comparaison de personnes-années d'emplois générés dans tous les sous-secteurs par milliard CFA d'investissement initial donne des résultats variés selon l'importance de l'utilisation de la main d'oeuvre dans les investissements de chaque secteur. Les résultats de cette comparaison sont les suivants:

TABLEAU 6

ESTIMATION DE L'EMPLOI PUBLIC ET PRIVE GENERE PAR LES INVESTISSEMENTS
DU PROGRAMME DEVELOPPEMENT RURAL ENTRE 1987 ET 1989

Nombre des personnes-années d'emplois *	CONSOUMATIONS INTERMEDIARES						RESULTANT DU CONSOUMATION FINALE	TOTAL D'EMPLOI GENERE	DGHT Secteur Publique	COMT Secteur Privé
	AGRICUL- TURE	ELEVAGE	FORET ET FAUNE	HYDRAUL RURALE	ETUDE/RECH FORM/ENSEIG	MICRO- REALIS					
Professionnel/ingénieurs	1983	383	335	643	161	72	209	3786	1994	1793	
Ouvriers qualifiés	4072	787	688	1321	330	148	430	7776	4095	3682	
Ouvriers spécialisés/Employés	10211	1973	1726	3314	82	372	1078	19502	10269	9233	
Manœuvres et apprentis	5052	976	854	1640	410	184	534	9649	5081	4568	
Total	21317	4120	3603	6918	1728	776	2251	40714	21439	19275	
dont moyenne annuelle:	7106	1373	1201	2306	576	259	750	13571	7146	6425	

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* L'emploi public est estimé à partir du 80% des dépenses pour le Personnel Nigérien. (20% représentant les frais de formation inclus). Ceci est égal à 12820 millions de CFA.

** Source de hypothèses de base: Etudes et Conjoncture, Min. du Plan /DAEP, Août 1986, p.20.a

Hypothèses:	% de total de l'emplois	Salaire annuel
Professionnel/ingénieurs *	9.30%	1440000
Ouvriers qualifiés **	19.10%	960000
Ouvriers spécialisés/Employés	47.90%	720000
Manœuvres et apprentis	23.70%	360000

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Personnes-Annee d'Investissement	d'Emplois Générés	Fal	Milliard	CFA
Etudes, Recherche, Formation, Enseignement			333	
Forêt et Faune			325	
Elevage			291	
Agriculture			290	
Micro-réalisation			267	
Hydraulique Rurale			243	

Moyenne :				

Les investissements en projets d'Etudes, Recherche, Formation et Enseignement semblent générer le pourcentage le plus élevé d'emplois par montant d'investissement, ce qui suggère que ces projets sont relativement grand utilisateurs de main d'oeuvre dans les types d'activités qu'ils financent, à savoir essentiellement l'enseignement et la recherche. Ce résultat peut être dû au fait que le personnel dans ce secteur est beaucoup plus formé que dans d'autres secteurs, et donc les gains salariaux de ce secteur sont plus élevés. Cette explication signifierait que les chiffres ci-dessus surestiment le nombre de travailleurs et sous-estiment le nombre de professionnels dans ce secteur. Les projets d'Hydraulique Rurale, d'autre part, génèrent le moins d'emplois pour l'économie, reflétant peut-être la nature hautement intensive de l'investissement capital de beaucoup de ces investissements. Ceci pourrait aussi être dû à la tendance de ces projets de mélanger le coût du personnel avec les coûts d'infrastructure, exagérant ainsi la prédominance d'investissement en capital et diminuant la prédominance d'investissement en main d'oeuvre pour le secteur. Pour la plupart des autres secteurs, les différences sont minimales dû au fait de la ressemblance des types d'investissements effectués.

Un estimé approximatif du nombre de personnes employées par le secteur public ou embauchées par les projets du secteur public pour les activités de Développement Rural peut être fait en supposant que l'allocation des investissements en coûts du personnel, fournit dans les Dossiers Standard, ne représente que l'emploi du secteur public. Le montant total des investissements en développement rural programmés pour le personnel est de 16,025 millions CFA. Si ce montant (réduit de 20% pour tenir compte des fonds dépensés en formation) est supposé représenter la facture totale des salaires pour l'emploi public, le TES suggère les résultats suivants :

Création de l'Emploi Dans Le Secteur Public

	TOTAL (nombre d'hommes-années)	PAR ANNEE
Professionnels/Ingénieurs	1994	684
Ouvriers qualifiés	4095	1385
Ouvriers spécialisés/Employés	10289	3424
Manœuvres et Apprentis	5081	1694
Nombre Total	21439	7146

Ces postes du secteur public représentent 52% de tout l'emploi généré par les investissements en Développement Rural. Ceci démontre que ces investissements ont une forte tendance vers les interventions du secteur public, quand on sait que dans l'économie globale, l'emploi du secteur public représente moins de 2% de la masse des travailleurs. Mais ces estimés du secteur public sont trompeurs, car beaucoup d'employés des projets d'investissement ne deviennent pas membres de la Fonction Publique.

En tant que proportion de la masse des travailleurs publics, ces estimés sont aussi élevés. En 1986, la masse des travailleurs publics était estimée à 32967 personnes.⁷ Par comparaison, l'impact annuel d'emplois du secteur public générés dus aux investissements en développement rural représentent 21% de toute la Fonction Publique. Cependant ils ne représentent pas nécessairement une extension du secteur public puisque la plupart de ces emplois représentent une prolongation des projets en cours. De plus, les postes des nouveaux projets seront occupés majoritairement par le personnel qui travaille actuellement sur les projets en voie d'achèvement. L'on peut s'attendre à ce que l'augmentation de la masse des travailleurs publics suive étroitement l'augmentation réelle des investissements faits par le secteur public. En monnaie courante, l'on s'attend à ce que cette augmentation ne soit que de 11% par an pour les trois prochaines années. Si l'inflation atteint une moyenne d'environ 6% par an, cela représente une augmentation d'investissements et par conséquent de la masse des travailleurs du secteur public d'environ 5% par an.

IV E. Effet sur la Balance Commerciale et Celle des Paiements

⁷ "Etudes et Conjoncture", DAEP/ Min. du Plan, Rép. du Niger. Août 1986, p.22.

Comme nous l'avons fait remarquer précédemment, la demande générée par les investissements peut être satisfaite soit par la production locale soit par les importations des produits d'autres pays. En plus, certains articles produits localement peuvent eux-mêmes nécessiter des intrants importés. Ces deux effets, les consommations intermédiaire et finale des produits étrangers provoque une détérioration de la balance nationale commerciale. De plus, satisfaire à la demande avec des produits étrangers plutôt que nationaux représente une baisse de la demande dans l'économie locale, ce qui réduit proportionnellement l'effet "multiplicateur" et atténue la stimulation de l'économie que les investissements produisent. Cependant, économiquement, il peut être préférable d'importer plutôt que de produire localement si le coût à l'économie de la production locale est plus élevé que le coût d'importation. De plus, des dépenses d'importations sont souvent nécessaires car un produit peut ne pas être produit localement. Au Niger, par exemple, les importations jouent un rôle particulièrement important dans l'approvisionnement des intrants d'investissements. Presque tout l'équipement, les véhicules, les matériels manufacturés et le carburant pour les investissements doivent être importés de l'étranger.

En plus de la baisse de la demande causées par les importations, une portion significative de la demande en consommation finale est aussi perdue pour le Niger à cause du rapatriement des salaires et des bénéfices des expatriés travaillant au Niger. Le résultat en est qu'une grande partie de la valeur ajoutée à la production locale est perdue pour l'économie comme source de consommation finale ou d'épargne.

Le Tableau 7 montre le pourcentage de la demande totale qui va aux importations et au rapatriement des salaires pour les investissements en économie rurale. En général, la perte de demande à l'économie de ces deux effets est d'environ 44% de la demande totale générée. De ce pourcentage, environ 34% sont dûs aux importations et 10% sont dûs au rapatriement des salaires des expatriés. Cependant, ces deux effets varient considérablement entre les sous-secteurs dans leur contribution à la perte de la demande intermédiaire. Les micro-réalisations ne perdent que 5% de la demande totale aux rapatriements à cause des rares expatriés impliqués dans ces investissements, tandis que la plupart des autres secteurs montrent une perte allant de 15 à 21% de la demande due au nombre important d'expatriés. D'autre part, l'Élevage et la Forêt et Faune indiquent le pourcentage le plus bas de pertes aux importations (36,2% et 34,4% de demande respectivement), tandis que les micro-réalisations montrent le taux le plus élevé à 45%. Dans l'ensemble, la perte de la demande de consommation intermédiaire pour tous les sous-secteurs se situe entre 50 et 60% de la demande totale avec une moyenne de 53%. La perte de la demande finale est environ la même, 54%, mais cependant la perte relative aux importations est moins élevée pour la consommation finale, tandis que les pertes aux

TABLEAU 7

ESTIMATION DE LA DEMANDE GENEREE PAR LES INVESTISSEMENTS ECHAPPANT A L'ECONOMIE NATIONALE

En pourcentage de la Demande Générée :	EFFET A PARTIR DE LA CONSOMMATION INTERMEDIAIRE						EFFET TOTAL INTER- MEDIAIRE	EFFET A PARTIR DE LA CONSOMMATION FINALE	EFFET TOTAL SUR L'ECONOMIE
	AGRICUL- TURE	ELLEVAGE	FORET ET FAUNE	HYDRAU- RURALE	ETUDE/RECH FORM/ENSEIG	MICRO- REALIS			
IMPORTATIONS GENERES:	36.76%	36.23%	34.46%	36.16%	34.20%	40.51%	36.39%	14.36%	24.23%
- CONSOM. INTERM. IMPORTEE	24.58%	22.41%	21.64%	28.72%	22.98%	24.51%	24.88%	10.86%	17.22%
- IMPORTATIONS DIRECTES (CAF)	12.18%	13.81%	12.81%	7.44%	11.22%	16.01%	11.51%	3.50%	7.02%
REPATRIEMENT DE REVENU:	16.85%	17.88%	21.22%	12.99%	21.31%	12.89%	16.62%	0.13%	7.69%
- SALAIRES DES EXPATRIES	7.40%	7.85%	9.33%	5.68%	9.37%	5.65%	7.29%	0.11%	3.37%
- COTISATIONS SOCIAL EXPAT.	0.06%	0.05%	0.04%	0.09%	0.04%	0.07%	0.06%	0.02%	0.04%
- EXCED. BRUT EXPLOIT. ETR.	9.39%	9.98%	11.85%	7.21%	11.90%	7.17%	9.26%	0.14%	4.28%
TOTAL DE DEMANDE GENEREE ECHAPPANT A L'ECONOMIE LOCAL:	53.61%	54.11%	55.67%	49.15%	55.50%	53.40%	53.01%	14.50%	31.92%
En valeur (millions de PCFA):									
IMPORTATIONS GENERES:	30737	5803	4289	11010	2000	1464	55302	25918	81220
REPATRIEMENT DE REVENU:	14087	2864	2641	3954	1246	466	25257	510	25767
EFFET TOTAL (NEGATIF) SUR LA BALANCE DES PAIEMENTS	44824	8667	6930	14964	3245	1929	80559	26428	106987

* Supposant un taux de rapatriement des salaires et cotisations sociales des expatriés de 100% sur les Excédents Bruts aux Exploitations des expatriés. Ceci est estimé à 1.27 fois le salaire des expatriés. (Ce taux est estimé à partir des estimations de La Hay et Matels, 1985).

rapatriements des salaires sont proportionnellement plus grandes.

La seconde partie du Tableau 7 donne une estimation de la valeur des importations générées par les investissements directs et indirects en Développement Rural. Il indique que sur les trois ans du programme d'investissement, la balance commerciale du Niger sera affectée défavorablement de 81,2 milliards CFA, (approximativement 27,1 milliards CFA par année). Ceci représente environ 7% des importations prévues sur la période de trois ans de l'investissement actuel. Selon les projections de K. TOH en 1986, on s'attend à ce que la balance commerciale du Niger maintienne un déficit annuel allant de 26 et 28 milliards CFA. Toutefois, ce montant a à peu près la même amplitude que la contribution au déficit des investissements en développement rural. Cependant, l'analyse ci-dessus n'a pas examiné les effets indirects des investissements générant des exportations qui serviraient à réduire cet effet.

Un estimé approximatif des effets supplémentaires sur la balance des paiements dûs aux effets secondaires des investissements est possible en combinant ces résultats et les estimations des rapatriements des gains. La valeur des rapatriements générés est estimée à 25,7 milliards CFA. Combiné à l'effet négatif sur le commerce, ceci suggère un effet net de détérioration sur la balance nationale des paiements de 107,0 milliards CFA sur les trois ans.

Bien sûr, ces effets ne sont qu'une partie de tout l'impact. A court terme, les pertes citées ci-dessus sont plus que compensées par les transferts d'investissements en capital pour effectuer les investissements initiaux. Ceux-ci totaliseront environ 127 milliards CFA pour le secteur du Développement Rural dans les trois prochaines années. De plus, ils ignorent l'impact des exportations générées ou des importations remplacées comme partie des rendements à long terme de l'investissement. L'analyse n'évalue pas non plus les effets du remboursement de la dette sur les emprunts initiaux effectués. Néanmoins cette analyse partielle démontre très clairement l'effet fortement défavorable sur la balance nationale commerciale et la balance des paiements qui sont dérivées des répercussions secondaires initiales des investissements du secteur public au Niger.

* K. Toh, p. 18 b. Tableau 6. Scénario A "Suppositions Conservatrices"

V. CONCLUSIONS

L'analyse du présent rapport a tenté d'identifier les effets secondaires principaux des investissements publics en Développement Rural à court terme. Du à la qualité inférieure des données utilisées, les conclusions tirées contiennent de larges marges d'erreur et devraient donc être traitées avec circonspection. Néanmoins, l'analyse a produit des résultats qui fournissent néanmoins des ordres de grandeur de l'impact potentiel immédiat que les investissements en Développement Rural peuvent produire. En résumé, ils ont suggéré que :

- les investissements en Développement Rural génèrent une demande totale dans l'économie équivalente à 2.5 fois l'investissement initial.
- la valeur ajoutée totale du PIB, comme résultat de cette demande indirecte, est presque équivalente à la valeur de l'investissement initial, mais ne justifie pas en soi-même l'investissement.
- le gouvernement récupérera approximativement 90% de l'allocation initiale du trésor à ces investissements par les impôts indirects et les taxes sur la consommation intermédiaire et finale générée par les investissements.
- les investissements généreront approximativement 300 personne-années d'emploi par milliard investi pour un total de 40700 personne-années d'emploi pendant la période d'investissement. Cette création d'emplois sera largement réalisée en tant que continuation de l'emploi généré par les programmes d'investissements précédents; elle n'ajoutera pas beaucoup de nouveaux emplois dans l'économie.
- le processus d'investissement aura un effet négatif sur la balance nationale des paiements équivalente à 44% des investissements initiaux.
- généralement les investissements dans tous les sous-secteurs du Développement Rural ont des effets secondaires similaires dus à la ressemblance des types d'investissements effectués dans tous les sous-secteurs. Cependant, à cet égard, L'Hydraulique Rurale se détachait dans un certain nombre d'analyses à cause de sa haute concentration en investissements d'infrastructure. Cette différence peut être due tant par les erreurs dans la catégorisation des coûts d'investissement que par les différences en investissements réels.

Les effets positifs sur l'emploi et la génération de la demande secondaire décrits ci-dessus tend à être initialement le résultat le plus remarquable pour de nombreux projets et par conséquent la composante des investissements qui a le plus de valeur. Cependant, en dépit de l'imminence de leur impact, ces effets ne justifient pas nécessairement les investissements effectués. Par exemple, la création d'emplois provisoires n'est bénéfique à l'économie dans son ensemble que si le produit généré par les employés est plus grand que les coûts de leur emploi. En général, comme l'analyse de la valeur ajoutée aux investissements l'a démontré, les bénéfices immédiats de la dépense d'argent ne suffisent pas à justifier leurs coûts. Ils doivent plutôt reposer sur les résultats productifs des investissements que sur leur effets secondaires initiaux.

Une deuxième mise en garde aux conclusions ci-dessus concerne le fait que l'analyse de l'impact immédiat suppose que les investissements ont été faits dans une situation économique statique dans laquelle les coefficients du Tableau Entrées et Sorties, qui décrit la structure de l'économie, restent fixes. Bien sûr, en réalité, la structure de l'économie générale change avec le temps. De plus, parce que l'impact sur les investissements a été considéré séparément, il n'est pas influencé par les contraintes extérieures qui peuvent servir à réduire ou à rehausser ces impacts.*

Finalement, il faut bien comprendre que, parce que cette analyse n'a pris en compte qu'un interval d'investissement de trois ans, elle ne peut être utilisée pour évaluer les effets supplémentaires de ces investissements sur la Relance Economique. Ceci est dû au fait que la demande générée par les investissements entre 1987 et 1989 continuera simplement en grande partie le niveau d'activité économique déjà obtenue grâce aux investissements précédents. Une croissance d'impact ne sera possible que par l'accroissement des investissements ou la réalisation d'investissements plus efficaces.

Une évaluation complète de la valeur économique des investissements nécessite une estimation des impacts productifs directs et indirects à plus long terme et pas seulement les répercussions immédiates des dépenses d'investissement. Car, c'est seulement sur la base des rendements éventuels des investissements que leur viabilité et leur impact général peuvent être évalués. L'évaluation de ces bénéfices économiques n'a pas

* Si par exemple, il y a une contrainte à la production de ciment local qui est utilisé par un investissement, la demande d'investissement pour le ciment peut être canalisée en importations, résultant en une perte de demande à l'économie et en une détérioration de la balance commerciale.

été examinée ici, mais c'est une tâche importante et nécessaire pour évaluer les investissements futurs. Cette activité devrait être sous la responsabilité de ceux qui choisissent les projets pour l'investissement public.

ANNEX A

TABLEAU A.1

TABLEAU DES EFFETS INDIRECTS INITIAUX DES INVESTISSEMENTS
 PUBLIÉS DANS LE SECTEUR DEVELOPPEMENT RURAL DANS LE
 CADRE DU PROGRAMME D'INVESTISSEMENT 1977-78

LEF ----	REPARTITION DE L'INVESTISSEMENT INITIAL	EFFET SUR LA CONSUMATION INTERMEDIAIRE	EFFET SUR LA CONSUMATION FINALE	EFFET TOTAL DE LA DEMANDE ADDITIONNELLE GENERE	TAUX DE RETOUR SUR L'INVESTISSEMENT INITIAL
1 AGRICULTURE		3228.22	30105.13	33333.35	25.05%
2 ELEVAGE		6247.87	14889.60	21127.47	15.88%
3 PECHE-FORÊT TOTAL		429.89	2107.28	2537.16	1.51%
4 DES MINES		0.00	0.00	0.00	0.00%
5 PROSPECTION MINIÈRE		0.00	0.00	0.00	0.00%
6 INDUST. AGRO-ALIMENTAIRE		314.75	1375.46	1690.25	1.27%
7 TEXTILE		81.59	1979.56	2061.14	1.55%
8 MATER. DE CONSTRUCTION	17405.3	1122.28	0.00	1122.28	0.84%
9 AUTRES INDUST. MANUF.		1173.70	1510.55	2684.24	2.02%
10 ENERGIE		2127.53	1142.96	3289.48	2.47%
11 BÂT MODERN	39007	3276.83	-0.42	3276.41	2.46%
12 TRANSPORT MODERNE		2964.40	1867.83	4832.23	3.63%
13 SERVICES AUX MENAGES		42.39	734.13	776.51	0.58%
14 SERVICES AUX ENTREPRISES	10892.1	4834.54	1773.35	6607.90	4.97%
15 BANQUES-ASSURANCES		653.28	888.57	1541.85	1.16%
16 SERVICES IMMOBILIERS		1680.95	907.09	2588.03	1.94%
17 ARTISANAT ALIMENTAIRE		140.69	9592.27	9732.95	7.31%
18 AUTRE ARTISANAT		3114.85	2244.04	5358.90	4.07%
19 BÂT TRADITIONNEL		1013.86	142.24	1156.10	0.87%
20 SERVICES TRADITIONNELS		623.52	7783.35	8406.87	6.32%
21 SERVICES NON-MARCHANDS	65778.1	0.00	0.00	0.00	0.00%
CONS. INTERM. LOCALES (a=1..21)	133062.5	33081.14	79042.99	112124.13	84.25%
22 AGR. ELEVAGE/IAA		2155.49	8266.67	10422.16	7.83%
23 TEXTILES		987.32	3768.90	4756.22	3.57%
24 MINIERS-MAT CONSTRUCTION		3403.32	317.72	3721.04	2.80%
25 PÉTROLE-ÉNERGIE		8112.26	454.28	8566.54	6.44%
26 CHIMIE-PLAST.		5010.10	1178.31	6188.40	4.65%
27 BOIS-MÉTAUX BRUTS		2549.59	2.74	2552.33	1.92%
28 OUTILLAGES-EQUIPEMENT		13727.64	0.00	13727.64	10.32%
29 AUTRES		3287.17	884.78	4171.96	3.13%
30 SERVICES		3375.36	220.72	3596.08	2.70%
CONS. INTERM. IMPORTÉES (b=22..30)		42608.24	15094.12	57702.36	43.36%
TOTAL CONSOMMATION INTERM (C=a+b)		75689.38	94137.11	169826.49	127.61%
REMUNERATION DES SALAIRES (d=31..35)		51223.82		51223.82	38.49%
31 SALAIRES LOCAUX		30432.79		30432.79	22.87%
32 SALAIRES EXPATRIÉS		18819.64		18819.64	14.14%
33 COT. SOC. LOCALES		987.02		987.02	0.74%
34 COT. SOC. EXPATRIÉS		223.68		223.68	0.17%
35 AVANTAGES EN NATURE		760.69		760.69	0.57%
36 IMPÔTS INDIRECTS		4116.63		4116.63	3.09%
37 MOINS SUBVENTIONS		264.36		264.36	0.20%

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TABEAU A.1 205 L

	1954	1955	1956	1957	%
.....	3.54	3.54	3.54	3.54	
.....	7210.75	7210.75	7210.75	7210.75	
.....	12.4	12.4	12.4	12.4	
.....	4000.00	4000.00	4000.00	4000.00	15.5%
.....	9.149	9.149	9.149	9.149	0.03%
.....	105.274	105.274	105.274	105.274	0.4%
.....	297.07	297.07	297.07	297.07	1.1%
.....	7.55.00	7.55.00	7.55.00	7.55.00	0.03%
.....	0.00	0.00	0.00	0.00	0.0%
.....	20889.73	20889.73	20889.73	20889.73	15.5%
.....	2175.12	2175.12	2175.12	2175.12	1.7%
.....	2150.45	2150.45	2150.45	2150.45	1.6%
.....	6174.31	6174.31	6174.31	6174.31	4.6%
.....	5225.44	5225.44	5225.44	5225.44	3.9%
.....	548.67	548.67	548.67	548.67	0.4%
.....	1759.01	1759.01	1759.01	1759.01	1.3%
.....	476.85	476.85	476.85	476.85	0.3%
.....	243.17	243.17	243.17	243.17	0.1%
.....	233.67	233.67	233.67	233.67	0.1%
.....	0.00	0.00	0.00	0.00	0.0%
.....	32315.73	32315.73	32315.73	32315.73	24.2%
.....	13702.5	24107.06	74137.11	335144.17	251.6%
.....	14137	14137	14137	14137	1
.....	28153	28153	28153	28153	0

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LIST OF PERSONS MET

ORGANIZATION	NAME	POSITION
GOVERNMENT OF NIGER		
Presidence de la Republique	Mr. Nassirou SABO	Secretaire General de la Presidence
Cabinet du Premier Ministre	Mrs. GOUNE	Conseiller Economiste
Ministere du Plan	Mr. Amanf BAWA Mr. Mamane BALA	Directeur du Financement des Investissement DFI
Ministere de l'Agriculture et de l'Environnement	Mr. Alassane MOROU Mr. MOHA	Directeur des Etudes et de la Programmation Direction des Etudes et de la Programmation
Secretariat du Comite de Gestion, FC	Mr. Ali HAROUNA Mr. Caza GAO Mr. Charles DRILLING	Secretaire executif ad interim Conseiller Agricole Conseiller Financier
Ministere des Finances	Mr. ABDOULAYE	Directeur des Finances Exterieures
Union Nationale des Cooperatives	Mr. Soussou MOUSSA Mr. Ade ABDOULAYE	Directeur General Directeur Adjoint
Centrale d'Approvisionnement	Mr. Amadou BAGNOU MR. Mosso SOLEYMANE	Directeur General Conseiller Financier
OPVN	Mr. Aridouana IBRAHIM Mr. Younoussa BOUREIMA Cheick Abdelkader KOITE	Directeur Financier Chef Comptable

USAID		
	Mr. George EATON	Director
	Mr. Ernest GIBSON	Supervisory ADO
	Mr. Abdu IBRO	Program Specialist, ASDG
	Cdt SALEY	Senior Program Specialist, ASDG
	Mrs. Erna KERST	Project Development Officer
	Mr. Frank MARTIN	Program Economist
	Mr. Kifle NEGASH	Agricultural Economist
	Mr. Roger BLOOM	Project Officer, ASDG

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GOVERNMENT OF NIGER		
Présidence de la République	Mr. Nassirou SABO	Secrétaire Général de la Présidence
Cabinet du Premier Ministre	Mrs. COUNE	Conseiller Economiste
Ministère du Plan	Mr. Amani BAWA Mr. Hamane BALA	Directeur du Financement des Investissements DFI
Ministère de l'Agriculture et de l'Environnement	Mr. Alassane MOROU Mr. MOHA	Directeur des Etudes et de la Programmation Direction des Etudes et de la Programmation
Secrétariat du Comité de Gestion, FC	Mr. Ali HAROUNA Mr. Caza GAO Mr. Charles DRILLING	Secrétaire exécutif ad interim Conseiller Agricole Conseiller Financier
Ministère des Finances	Mr. ABDOULAYE	Directeur des Finances Extérieures
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OPVM	Mr. Aridouana IBRAHIM Mr. Younoussa BOUREIMA Cheick Abdulkader KOITE	Directeur Financier Chef Comptable

USAID		
	Mr. George EATON	Director
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	Cdt SALEY	Senior Program Specialist, ASDG
	Mrs. Erna KERST	Project Development Officer
	Mr. Frank MARTIN	Program Economist
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Mr. Zakari MADAGOU	CARE-International
Mrs. Leigh HEART	CARE-International
Mr. Youssef SABET	Defense et Restauration des Sols
Chef de Village	Garadume
Secetaire de Cooperative	Garadume

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Mr. Thomas PRICE	Consultant

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