Interplay of Adjustment and Investment Operations: Agriculture in Madagascar

During the 1980s the success of adjustment operations supporting institutional changes and policy reforms in Madagascar had adverse effects on ongoing investment projects in agriculture. Policy-based lending operations changed the prices, marketing and institutional arrangements, and financial flows on which the projects depended, with severe consequences for operational performance and flows of benefits. The failure of these investment projects, much more apparent now than at the time they were completed, illustrates the need for close coordination and coherence between adjustment and investment operations supported by the Bank.  

Madagascar, with a population of 12.5 million and annual per capita income of $230, is one of the poorest countries in the world. In the late 1970s and early 1980s, the country’s agricultural sector contracted while the population continued growing. Madagascar had been a net exporter of rice in the 1960s, but became a net importer in 1980. Important reasons were the low financial priority of agriculture in the government budget, controls that stifled economic activity, and inefficiency and poor management in agricultural public institutions. 

In an attempt to restore the production of key crops—both to promote self-sufficiency in food and to increase cash crop production for export—the government adopted a strategy designed to:

- ensure adequate producer prices and incentives;
- improve rural infrastructure, particularly access and feeder roads;
- reduce state marketing ventures and support private enterprises;
- disengage government from unprofitable and redundant parastatals while reorganizing and strengthening some of the government agencies;
- improve agricultural services to farmers.

Other goals were to expand basic agro-industries to process local raw materials, and to increase rural employment.

Investment projects

To support this strategy, IDA approved four investment projects in quick succession in 1979-83 (see Box).

When the projects were identified and appraised, all four seemed to have a good chance of success: they all built on earlier successful projects, apparently had few technical risks, were supported by bilateral and multilateral assistance, and were to be implemented by well-established, efficient parastatals. Each of the projects supported important sector policy reforms and each was designed as a vehicle for innovative institutional changes.

The institutional changes included:

- Reinforcing the financial autonomy and efficiency of the parastatal executing agencies, through a combination of commercial activities, cost recovery, and government subsidies. The agencies were to be restructured...
Investment Projects

Mangoka Agricultural Development (total cost $29 million) supported irrigation for cotton and rice grown by settlers. It provided for land clearing and levelling; irrigation, drainage, and roads; construction of schools for children of the 3,200 migrant families; provision of farm inputs; and applied research. Soil salinity and drainage problems resulted in lower yields than anticipated, farmers’ failure to pay their service charges, and subsequent financial difficulties for SAMANGOKY, the project authority. When the credit closed, only 60 percent of the project area was fully equipped.

SAMANGOKY was de facto abolished in 1991. Lack of maintenance has resulted in the silting of the main canals: water availability has been reduced, and irrigable area and yields have considerably declined.

Lac Alaotra Rice Intensification (total cost $38 million) rehabilitated an irrigation system benefitting about 35,000 families. Water users’ associations and other forms of farmer organization were successfully established. The project helped improve the efficiency and financial autonomy of SOMALAC, its executing agency, until changes in government policy removed the latter’s marketing monopoly.

SOMALAC was abolished in January 1991 before full completion of civil works; its equipment was sold and its personnel laid off. The irrigation system has not been maintained; the main and secondary canals have silted up and water is scarce at the field level. In the two years following project completion, the project-irrigated area shrank by about 20 percent and crop yields fell far below the estimates made at project completion.

The Cotton Development Project (total cost $34 million) was designed to increase cotton production through a combination of area expansion, increases in yields, and producer price policy. The project supported a major restructuring of HASYMAl, the national cotton company. The project was implemented as planned, except for its rural roads component. Research and training activities were successfully completed. Under the project, HASYMAl was to lose its monopoly and open processing and marketing activities to the private sector. Most growers continued to rely on HASYMAl for the import and supply of inputs.

Second Mangora Forestry (total cost $30 million) supported the continuation of a large planting program started in the late 1970s for producing woodpulp. The project provided for maintenance of pine and eucalyptus plantations, new plantings of pine, construction of roads and villages, research, and marketing studies. Planting went well until an economic and marketing study concluded that sawnwood would be a better alternative than woodpulp. Project components and scope were changed accordingly; implementation took twice the time originally planned.

and strengthened through injection of government funds or capital increases, and training for staff. The two irrigation agencies were to become financially autonomous through exploiting their marketing monopoly and recovering their costs.

• Reducing somewhat the government’s role in agriculture. Farmers’ associations were to gradually take over the running and maintenance of the irrigation systems. They were to obtain and guarantee agricultural credit for their members, and organize seed cotton collection, packing, and loading at the village level.

• Introducing producer price setting and cost recovery mechanisms. Adequate producer prices were to be set for rice and cotton.

• Strengthening agricultural research and extension through technical assistance, equipment, and funding.

All four projects achieved some success in institution building and policy dialogue. The restructuring of the parastatals began well; their functions were trimmed, redundant personnel laid off, and performance indicators clearly defined. Profits from input supply and rice marketing allowed the Lac Alaotra project authority to recover a significant part of its operating costs. Establishing efficient farmers’ organizations was the most successful institutional achievement of both the Lac Alaotra and Cotton projects.

Research and extension resulted in the successful introduction of two high-yielding varieties of paddy.

Adjustment operations

While these projects were being implemented the adjustment process gained momentum in Madagascar and the government moved to a broader agenda of policy reforms. These reforms were supported by the Bank through a series of structural and sectoral adjustment operations approved in 1982-88 and totaling some $250 million.

Four structural and sectoral adjustment credits supported major policy reforms (see Box).

Agricultural sector adjustment credit

The second of these, the Agricultural Sector Adjustment Credit (CASA, approved 1986), supported several sector policy changes. Its main goal was to liberalize rice marketing, to encourage the growth of supply and reduce the need for imports. Other changes supported were:

• Gradual elimination of subsidies on agricultural inputs, and
transfer of responsibility for input supply to the private sector.

- Better pricing and marketing systems for export and industrial crops.
- Improvements in public investments in agriculture.

CASA achieved its main goal of rice liberalization. This resulted in free trading, more efficient markets, lower government subsidies, higher producer prices, a production increase, drastic reduction in rice imports, highly competitive market situations, and rapid expansion of private mills.

Other components were less successful. In coffee, improvement of the pricing and marketing system for export did not evoke a production increase because of the dilapidated state of rural roads and the collapse of international coffee prices.

The government started disengaging from the direct distribution of fertilizers and other inputs, but a program to promote private sector participation was not prepared. The result was an abundance of private traders and inputs at the village level, but also severe product falsification.

Policy advice on the content of the public investment program had little impact; the seven projects which the Bank advised against were eventually funded by other agencies.

Contradictions between successive adjustment operations became evident: the major devaluation of 1987 concurrent with the Industry and Trade Policy Adjustment Credit (CASPIC) sharply reduced farmers' demand for fertilizers imported under CASA. CASPIC also introduced a non-discretionary licensing procedure for allocation of foreign exchange alongside CASA's more cumbersome procedure. This slowed down CASA's disbursements and led to a two-year delay in releasing the second tranche.

**Adjustment Operations**

**Industrial Assistance** (IDA $20 million, Special Facility for Africa $40 million) supported policy changes to increase efficiency and productivity in industry. Import liberalization, export promotion, reform of the public investment program (PIP), and encouragement of the private sector. The operation was designed to pave the way for a more comprehensive reform process. Supported by the sectoral adjustment operations that followed.

The quality of the PIP was enhanced, an investment code was prepared to encourage private sector development. Some import prohibitions were removed and replaced by tariffs and a few export-promoting measures were implemented. But substantial distortions remained in the trade regime.

**Agricultural Sector Adjustment** (IDA $20 million, Special Facility for Africa $33 million) was designed to liberalize the rice market, rationalize the public investment program in agriculture, provide better incentives to farmers, and formulate strategies for the next phase of adjustment. Rice liberalization was successful; other objectives, less so.

**Industry and Trade Policy Adjustment Credit** (IDA $16 million, Special Facility for Africa $67 million) supported liberalization of the trade and exchange rate regimes, import tariff reform, price decontrol, further rationalization of the public investment program, restructuring and privatization of public enterprises, and reforms in the banking system.

The core objective of increasing the efficiency of industry via trade policy reforms was substantially achieved. Public enterprise reforms were less successful, partly for lack of a clear shared view of the proper role of the state and of public enterprises in the economy.

**Public Sector Adjustment Credit** (IDA commitment $125 million), now being implemented, is designed to promote growth with increased social equity via measures to accelerate the supply response to the new market-oriented incentive structure. It is designed to build on the earlier adjustment operations by strengthening the public expenditure budgeting and allocation process, rationalizing the parastatal sector, liberalizing banking, removing the remaining administrative restrictions on external trade and finance (notably on coffee exports), and addressing the social aspects of adjustment.

**Interplay of adjustment and investment operations**

The adjustment operations promoting institutional changes and policy reforms had adverse effects on the four agricultural investment projects. The institution building goals of these projects became obsolete when the policy-based lending operations started changing the fundamentals—price, marketing and trade policy, institutional arrangements, financial flows—on which the projects depended. The overall performance of the projects seriously declined—to the extent that stopping the decline is now an urgent necessity for the government.

At completion, one of the four projects (Lac Alaotra) had been judged satisfactory, two unsatisfactory, and one uncertain. But a few years later (1993), the audit concluded that none of the four had sustained its benefits.

An important reason was the political unrest in 1991-92, which resulted in criminal fires in the forestry project, theft of crops in the cotton project, and vandalism

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of civil works in the irrigation schemes.

But another reason was the detrimental effects on the projects of the policy changes promoted by the adjustment operations—in particular, the abolition of the marketing monopoly on which investment projects depended, and the untimely liquidation of the two irrigation agencies:

- **Liberalization of rice marketing**, supported by CASA, ruined the two irrigation project agencies whose financial autonomy depended on monopoly rents in rice marketing.

- **Government divestiture** and liquidation or privatization of parastatals were important elements of the Bank-supported structural adjustment process. But the hasty, unilateral, and untimely dismantling of the irrigation agencies was disastrous for the projects. In both Lac Alaotra and Mangoky, operation and maintenance of irrigation facilities was not taken up by other agencies, public or private. Water distribution has become chaotic, water charges are no longer collected, and farmer organizations have not survived the withdrawal of support from project agencies. With the departure of agency personnel, the effects of training have been dissipated, and research and extension activities have stopped.

**Lessons, recommendations**

**Careful coordination between investment and adjustment operations:** In preparing adjustment operations there is a need to analyze the possible impact of the proposed economic and institutional adjustments on ongoing investment projects. If these adjustment operations are expected to affect the fundamentals—price, marketing and trade policy, institutional arrangements, financial flows—on which investment projects depend, explicit consideration should be given to concurrently revising the scope or design of the investment operations that will be affected.

**No abolition without transition arrangements:** Before planning to abolish a government agency, the possible effects of abolition need to be carefully assessed. Before abolition, measures need to be in place to ensure a smooth transition toward new public or private institutional arrangements.

**Coordination and consistency within adjustment programs:** In a large policy-based lending program, contradictions, competition, and conflicting objectives may easily arise among adjustment operations. Ideally, the government and the Bank should agree beforehand on a basic framework for adjustment, carefully identifying and sequencing the intended policy changes.

**Interagency cooperation:** Cooperation is needed on policy reforms among the government, the Bank, and other assistance agencies. While cooperation with bilateral assistance was excellent during the first implementation years of the four investment projects, different views emerged in the late 1980s on adjustment policies and priorities, resulting in the government, the Bank, and donors losing interest in the investment projects. Poor dialogue among bilateral and multilateral agencies did not reconcile divergent opinions and attitudes regarding Madagascar's public investment program in agriculture.