Livestock Management in Botswana: The Value of Previous Lessons

Since 1973, the World Bank has supported three projects in Botswana to help develop the livestock sector. The third project had mixed results. While it did succeed in establishing an effective land-use planning system, it failed to change traditional management techniques, and did not reverse overstocking or land degradation, according to a performance audit report by OED.*

The project did not adequately take into account the problems encountered in the first two projects, and failed to understand the difficulties involved in attempting to change the attitudes and traditions of livestock owners. The experience emphasized the need for continuity: it is essential to examine previous experiences and to have realistic expectations when supporting follow-up projects. A thorough understanding of local traditions and practices is needed when trying to change local attitudes and habits. Suitable incentives for change must be created.

Project goals

Over 70 percent of Botswana’s population lives in rural areas and earns a living from agriculture. Because of the dry climate, livestock production dominates agricultural activities. The first Bank-assisted project (1973-80) established a livestock marketing organization but failed to develop viable leased commercial ranches in remote state lands. The second project (1978-84) had difficulty in promoting communal grazing areas and developing commercial ranches.

The National Land Management and Livestock Project (NLMLP, 1985-93), the third project, contained a major component to strengthen land-use planning and management capabilities. By developing commercial ranches and enclosing communally grazed pastures, it aimed to improve rangeland resources and livestock production systems.

The project included four subcomponents, to (1) upgrade infrastructure and supervision of the main trek routes used by herds; (2) promote pilot programs in the management of communal grazing areas and development of group ranches; (3) provide the National Development Bank (NDB) with funds to give loans to ranches; and (4) help the government develop recommendations on prices and incentives to encourage sustainable land use and production of export-quality beef.

Results

The project was instrumental in establishing a sound process of land-use planning, but did not reduce overstocking and land degradation. Most of the project expenditures went to range and livestock development, and activities associated with improved livestock management or enclosed commercial ranches, pilot group ranches, and community grazing schemes had disappointing outcomes. Overall economic returns were poor.

Land-use planning

The land-use planning and management component was satisfactory and developed improved methodologies for rangeland monitoring. The project corrected some past zoning mistakes and improved land-use planning procedures. Previously, areas that had been zoned for commercial ranch development were found to have existing use rights, which led to appeals and litigation. Under NLMLP, such areas were not zoned for commercial development, or, if they had been, were dezoncd.

Studies were made of livestock-wildlife interactions, wildlife management areas were delineated and gazetted, and earlier zoning mistakes that caused interference with wildlife migration routes were corrected.

Experience with NLMLP also encouraged the government to re-
examine the Tribal Grazing Lands Program, which had two flaws: it
assumed there was much unused land available for development,
and it did not prevent those who were granted commercial ranch
lands from continuing to use communal grazing lands. A new na-
tional policy, adopted in 1991, allows fencing of rangeland in communal
areas, but placing less emphasis on commercial ranching.

Livestock management

The trek route component was implemented successfully, with
fencing installed and boreholes for water drilled. Trek routes will facili-
tate stock movement and marketing, and will avoid interfering with
migrating wildlife. But no data are available on whether the routes
help reduce cattle weight loss during treks. Because lands along the
routes are still overgrazed, significant reductions in weight loss by
cattle during treks are unlikely.

The extension service component of the pilot programs had poor
results. Trained local staff were always in short supply because many
left the service for better-paying jobs after being trained. Difficulties were
encountered in selecting suitable areas where people were willing to
participate in the pilot communal grazing and group ranch programs.

The project did succeed in establishing three pilot communal graz-
ing areas and eight group ranches (three are now unoccupied). The
main factor motivating villagers to participate in the pilot projects
seems to be the prospect of livestock watering facilities provided by the
government. Nothing has been done to improve grazing and livestock
management and many fences are still far from completed. Only
a small core of villagers actually worked on fences. In the group
ranches, animals belonging to each group member are often still
herded separately, and none of the
ranches has anyone but herdsman
in residence.

Credit

The credit component for commercial ranches failed. Poor man-
agement by the National Development Bank resulted in weak perfor-
mance, and severe drought conditions in 1987 compounded problems
for several years, reducing demand for credit as well as the creditworthi-
ness of many livestock owners. Only 67 commercial ranches were leased
compared to the original target of 130. Of these, 64 took subloans. Loan
supervision was poor, as was repayment performance.

Most of the investments made were for boreholes and perimeter
fences. Management practices on commercial ranches receiving project
financing were no different from those in traditional areas. After the
project was completed, the government restructured the National De-
velopment Bank, and the portfolio of loans to NLMLP ranches is now
under more effective management and supervision. But overall impact
on production has been negligible.

Incentives

The government did not act in accordance with the recommendations
of the study on livestock pricing and financial incentives. The Bank con-
sidered this an important issue, but the government did not pursue it
during appraisal or, subsequently, during project implementation. The
Ministry of Finance is now proposing an almost identical study. There
was very little incentive for livestock owners to change their traditional
practices during the project.

Lessons

- The Bank should be realistic in assessing the capabilities of imple-
menting agencies. Staff shortages and NDB weaknesses, both evident
in the second project, were not anticipated in the third. The absence of
a strong monitoring and evaluation component can be linked to this
over-optimism.

- Difficulties in changing traditional practices should never be
underestimated. The project required major changes in local atti-
tudes. In such cases, project staff must possess special interactive
skills and an intimate knowledge of the production environment. Nei-
ther of these elements was present.

- Financial incentives affecting traditional practices should be ana-
lyzed and taken into consideration before proceeding with a project
that requires changes in traditions. For NLMLP, attention to the finan-
cial incentive analysis may have determined to what extent pricing
and marketing policies affect the behavior of livestock owners. Poli-
cies that may significantly affect project outcome need to be ad-
dressed in the appraisal stage.

- A project time frame should take into account the difficulty of the
planned development, previous experience, and institutional ca-
pacity. In this case, five years were too short for the development
envisioned.

- Supervision missions need to focus on factors affecting perfor-
ance rather than simple monitor-
ing of implementation as defined in the
appraisal report. The Bank's
supervision missions did identify
the difficulties and obstacles en-
countered in communal area de-
velopment, but only near the end of
the project.