



STUDIO OWB

A beef improvement project in South Africa is looking to establish genetically superior cattle that produce good meat to support smallholder cattle production.

# African herdsmen raise their sights

Janet Lawrence reports on a beef improvement project aimed at helping smallholder farmers in South Africa lift their herds to a commercial standard

**C**an a project be too successful? Collaborators taking part in a project in South Africa designed to help disadvantaged cattle farmers began to wonder if this might be so, as their efforts started to bear fruit and more and more farmers clamoured to join in.

For the past decade South Africa has endeavoured to help struggling farmers; some subsist at a small scale by grazing cattle on communal land, others have leased land and are striving to build a business enterprise. Together these two groups own over four million head of indigenous and crossbred cattle.

If their farming enterprises could be improved, they could produce beef cattle to meet the specifications of the South African commercial markets. This would provide a genuine opportunity to substitute for some of the 48,000 tonnes of beef and 300,000 weaners imported annually to meet the country's domestic demand. And of course it would bring more income into poor communities.

ACIAR project developers saw the opportunity to empower these farmers to become self-sustaining by helping them to improve the quality of beef derived from their animals, and by teaching them the fundamentals of business and marketing. Thus an ACIAR project dedicated to founding a 'Beef Improvement Network' emerged, with its initial South African base in the Limpopo and North West Provinces.

The project contained three distinct, interdependent sub-projects. The first addressed issues relating to personal development of the farmers and establishing their support structures. The second dealt with improvement of the farmers' cattle, based around five different strategies – data gathering, comparing the

performance of the farmers' cattle in feedlots against those in commercial herds, training the farmers in best-practice livestock management, selection of sires with superior traits from among the indigenous cattle and assessment of the project's impact by an Industry Advisory Council.

Activities in the third sub-project took place in Australia. The project scientists selected Brahman and Belmont Red bulls as sires, then assessed their offspring out of 3000 cows for beef quality. The scientists were looking for genetically superior cattle that produced good meat in the harsh tropics – such animals could benefit both Australia and South Africa. This exercise demonstrated the value of genetic markers in selecting commercial cattle for carcass and beef quality.

At the start of the project in South Africa the project members grouped farmers into local teams, then matched each with a support team (a group with expertise in beef production, management and marketing). The producer and mentor teams came together to establish a plan that would lead to continuous improvement and innovation (CI&I) of the farmers' beef business systems.

The farmers were obviously ready to grasp this opportunity. Their enthusiasm was evident from the start, and almost immediately they were implementing some of the ideas that emerged from the consultations they had together and with their mentor teams. Their enterprises started to grow as their horizons expanded and they began to recognise that factors such as throughput and reducing costs were as important as final market price in lifting profitability of cattle production.

The Industry Advisory Council met in October 2002 to receive





Overwhelming success: farmers turn up in force for the Farmer Day; and (below) ACIAR program manager Dr Bill Winter inspects Nguni cattle in the feedlot tests.



## Meat lovers' friend

Dr Heather Burrow, Australian leader of the 'Beef Profit Partnerships' project, knows better than most what constitutes a good piece of meat. She is chief executive of the new Cooperative Research Centre (CRC) for Beef Genetic Technologies and has built her career around improving the quality of tropical breeds of beef cattle.

Heather explains that the ACIAR project evolved out of her earlier work in South Africa. While undertaking a genetic benchmarking of the Australian Belmont Red against the South African Bonsmara cattle, she also had the opportunity to appraise the indigenous breeds such as Nguni. She thought it would be worthwhile to

explore the potential for reducing the Brahman content of cattle in northern Australia – which are hardy but have poorer meat quality and lower fertility – by including a component of the southern African high-performing breeds. The southern African breeds are also relatively well adapted to tropical environments but have better inherent meat quality and fertility.

When she raised this idea with ACIAR for a prospective project it received guarded enthusiasm, but the suggestion came back that the project be modified to better focus on helping South Africa's black farmers. The project proceeded, with a much stronger focus on the emerging farmers.

Heather believes the project's success is testimony to the excellent cooperation between all the partners. She singled out two exceptional people, Ephraim Matjuda and Richard Clark, for their leadership in engaging and enthusing the South African farmers. She is also delighted the project will benefit Australian farmers when some of the technologies developed in South Africa are channelled through the new Beef CRC.

a report from the ACIAR-commissioned review team, which had examined the project's strategic directions. The report indicated that the farmers found it a little difficult to distinguish between this project and other projects undertaken by the collaborating partners, so it was decided to give the project a local name – 'Beef Profit Partnerships' (BPP) – and a project logo.

A very successful Farmer Day was held in January 2003. More than 200 visitors, mostly farmers participating in the BPP project, attended to observe first-hand the project's progress. The ministers of agriculture for Limpopo and North West Provinces also attended and spoke enthusiastically about the work. Farmers received feedback on a one-to-one basis, enabling them to determine how well their animals were performing relative to commercial animals in the feedlot.

The project has provided very visible evidence that cattle from resource-poor farmer herds have the capacity to meet the specifications of commercial markets. Comparisons under standard conditions between the indigenous breeds and breeds developed by the commercial sector showed little difference between them.

With the support of project team members, farmers sold their cattle through project-organised on-farm auction sales, or sales where the farmers pre-weighed their cattle and knew in advance the market price for their sale animals – and they received prices close to commercial values. Between 2002 and 2004, prices for weaner cattle rose by 54.2 per cent and those for mature cattle by 29.6 per cent. As well, on-farm sales led to significant cost savings and gave the farmers added flexibility, because when demand was low they no longer faced the unattractive alternatives of settling for a poor price or transporting them home again.

As some of these highly positive advances emerged from the project, the number of farmer teams operating through BPP grew until around 275 farmers were involved in 17 teams. Other farmers with no involvement in the project became interested. It was then that the scientists started to wonder if the project had become too successful. They wanted to educate and encourage as many as possible, but this was beyond the project scope.

The answer came in the form of support from the Australian-based Crawford Fund, which sponsored an extension of the training program. The project leaders could now develop and deliver a 'train the trainer' module, titled 'Agricultural leadership for sustained improvement and innovation in South Africa', to establish a network of people who could reach out to many more farmers.

The Crawford Fund training was a highly successful move. It became a sought-after privilege and there was national acclaim as people realised the benefits of the continuous improvement and innovation approach. Many involved in the project have now moved on to train others in the CI&I concepts using funds provided by the Provincial Departments of Agriculture and organisations such as the National African Farmers Union (NAFU).

In 2005, the concepts have now expanded to include four additional South African provinces, as well as Limpopo and North West Provinces, and emerging farmers from the dairy, sheep meat, wool and horticulture industries as well as beef cattle farmers.

The project has given new hope to many farmers. It has been so successful that NAFU developed a proposal to establish a new feedlot system, based on the cattle of these farmers. It is an opportunity to make these new benefits available to a much wider group of farmers.

NAFU is also investigating options to market the beef directly as a branded product to urban communities such as Soweto. In the shorter term, members of the South African Feedlot Association have established buyers in the region to access this previously untapped supply of cattle. A quiet revolution is under way.