Impala Platinum: At the Impala Platinum lease area, platinum production slipped by 7% in 2006 to 1.08m ounces—the lowest level in three years. Output of palladium and rhodium fell by over 10%, to 469,000oz and 116,000oz respectively.

Although Impala has significant expansion potential in **Zimbabwe**, it has only limited scope to raise production from its mines in South Africa. Historically the company's expansion strategy has been focused on concentrate purchase agreements with joint venture partners and third parties, but in February 2007 it moved to acquire a new project, with the announcement of a cash offer to buy out the London-listed company African Platinum (Afplats). The latter is the owner of the Leeuwkop project, downdip of Eastern Platinum and Pandora, on which a feasibility study was completed in 2006.

Lonmin: For the financial year ending September 2006, Lonmin reported a 3% increase in platinum production to 948,000oz (including metal toll-refined or sold as concentrate). Palladium output was up 8% at 439,000oz, while that of rhodium rose by 12% to 133,000oz.

In mid-December 2006, Lonmin announced a cash offer for *AfriOre*, owner of a 74% stake in the Akanani pgm deposit west of *PPRust*. The acquisition was completed in February 2007. Initial estimates are based on a 5m tonne per annum underground mine producing 250,000oz of platinum annually, with first production targeted for 2013; this would represent the first attempt to mine the Platreef underground.

Northam: Northam reported platinum production of 223,000oz in 2006, scarcely changed compared with the previous year; in contrast, palladium output slumped 12% to 96,000oz, while that of rhodium surged 38% to 30,000oz. Mine output was supplemented by the purchase of Merensky concentrate, containing some 7,400oz pgm, from an external source.

Aquarius Platinum: Production of platinum in concentrate from Aquarius Platinum's South African operations increased by 36% to 435,000oz in 2006, largely as a result of the successful start-up of the Everest project on the Eastern Bushveld. This new mine—the plant was commissioned in December 2005—produced 99,000oz of platinum in concentrate during its full year of operation. (Johnson Matthey, May)

# **AGRICULTURAL**

### **GENERAL**

#### **Food Gardens**

Statistics indicating a fall in food production do not reflect the increase in small plot holders.

As demand for organic food gathered momentum in Europe, America and other First World countries over the past two or three decades, so did international appreciation for the innovation of Africa's food gardening methods and training.

They have evolved from an age-old tradition of self-provision and continue to reinvent and advance themselves out of necessity.

Necessity has certainly been the mother of invention for inspired **Zimbabwean** food growers. Phiri Maseko, won international acclaim for his unique water harvesting and soil conservation methods; John Adebe put the Fambidzanai Permaculture Centre outside Harare on the world map, and Peter Morgan promoted the Arborloo ecological sanitation system, which has led to widespread recycling of human waste for fertiliser production (p. 17343C).

These men have become green heroes in their country as their work has helped the people of Zimbabwe to overcome drought and a serious lack of resources and infrastructure. Their innovation also spread far beyond their country's borders and was hailed in organic food production circles worldwide. International funding and involvement saw them extending the impact and imprint of their sustainable food production practices.

This led to the formation of a very effective Natural Farming Network (NFN) in Zimbabwe, which was instrumental in the establishment of the PELUM Association in 1995 as a cooperative network of permaculture organisations in various countries in east, central and southern Africa. Adebe later became coordinator of the regional desk of the PELUM Association. Under his leadership the PELUM College of Zimbabwe was established as a pilot project to train organic food growers, with the hope of replicating the college in other countries in the region. Currently PELUM consists of 160 civil society organisations in 10 countries—Botswana, Lesotho, Malawi, Rwanda, Kenya, South Africa, Tanzania, Uganda, Zambia and Zimbabwe—all working towards sustainable agriculture and food security in the region.

While official United Nations (UN) statistics indicate that per capita agricultural production in Africa has fallen by about 5% over the last 20 years, this figure does not tell the whole story as it does not effectively reflect the extent of own-use food gardening on the continent. Political instability in Africa, as well as food subsidies and food dumping in the West, have had a measurably detrimental impact on Africa's organised, for profit, agricultural production, but by default has also promoted household and community food gardening for own use.

Zimbabwe is a case in point, where organised agricultural production has declined dramatically. But today almost every household in Zimbabwe, urban and rural, has a small patch of land of about 200 square metres where vegetables for daily subsistence are grown. As in many other African countries, food gardens have increasingly provided the Zimbabwean population with a vital buffer against hard economic times, drought and political upheaval over the past 20 years.

Small farmers or plot holders in periurban areas in Zimbabwe have larger pieces of land, approximately half a hectare, where they not only produce for their own use, but also to supply urban food markets.

A politically stable environment provides far more fertile ground for the promotion of organic food cultivation, as South Africa's multiple award-winning Food and Trees for Africa (FTFA) has amply demonstrated. Since its launch in 1990, FTFA has helped to set up more than 1,300 organic food gardens in the country's poorest urban and rural communities and planted more than 2.3m trees, many of them fruit trees. Tens of thousands of adults have been provided with permaculture skills and, at any given time, FTFA has 600 additional applications from communities for assistance to set up new organic food gardens on its books. (African Decisions, May)

## **BANANAS**

#### Uganda

A radical new technique is producing impressive results.

The International Institute of Tropical Agriculture (IITA) has refined a technique to produce healthy banana plantlets that are not only 100% natural,