Both fertilizer consumption and production has fallen substantially in Serbia in recent years. Currently, around 800,000 tonnes of fertilizer product is consumed on an annual basis in Serbia, equating to around 50 kg nutrient per hectare, barely a fifth of EU levels and less than a half of application rates in Serbia in the late 1980s. Currently, a lack of availability of finance to farmers is a key stumbling block to addressing the problem of fertilizer underutilization.

Fertilizer production peaked in Serbia at around 2 million tonnes in 1988 but has contracted considerably since the turn of the century, partly due to a lack of investment in the sector. This is a problem that is now being addressed by two local fertilizer-producing groups.

ELIXIR GROUP

Elixir Group, a Serbian company with activities in the field of fertilizer, animal feed and food, operates two fertilizer plants in Serbia, at Sabac and Prahovo. New fertilizer production capacity entered service over the summer months for Elixir Group member, Elixir Zorka-Mineralna Dubriva D.O.O. of Sabac, Serbia.

Following this work at the Sabac site, Elixir Zorka can now produce up to 1,000 tpd of superphosphate powder (either powdered SSP or powdered TSP) and 1,030 tpd of granulated fertilizer (granular SSP/TSP, granular ammonium phosphate, granular MAP/DAP plus over 30 formulations of granular NPK). Towards the end of 2011, CFI Holding Pte. Ltd. received an award for the project; the contract covered the supply of technology, full engineering package, related services and proprietary equipment for the new plant, which incorporates pipe reactor technology. CFI Holding Pte. Ltd. also provided procurement engineering and on-site activities. This investment in the complex, formerly owned by HI Zorka Sabac but which has been operating as part of the Elixir Group since 2011, is estimated at €30 million.

Production results to date, in terms of physical and chemical characteristics of the granulated product, are reported to be exemplary. Thanks to the inclusion of highly efficient gas and water treatment facilities, the Elixir Zorka plant now produces no liquid effluent and gaseous emissions at chimney outlet are below 5 ppm for fluoride and less than 15 mg/Nm³ for both dust and ammonia.

During 2013, Elixir Zorka expects to register sales of approximately 120,000 tonnes within Serbia and in ten neighbouring countries; during 2014, the company forecasts that sales will increase to 250,000 tonnes.

Elixir Group acquired another fertilizer production unit in Serbia, the IHP Prahovo complex, in August 2012. Currently, Elixir Prahovo D.O.O. of Prahovo has the capacity to produce superphosphate powder (powered SSP/TSP) plus 500/700 tpd of granulated fertilizer (SSP/TSP, AS, MAP/DAP and more than 30 NPK formulations). This facility is the subject of a revamping process involving its phosphoric acid and fertilizer production and
storage facilities. Elixir Group plans to invest Euros 25 million at the Prahovo complex over the period 2012 to 2014 with the aim of ensuring achievable production capacity by the end of this period of 100,000 tpa of phosphoric acid and 250,000 tpa of mineral fertilizers. With this upgrading in mind, CFI holding Pte. Ltd. was awarded a contract in 2012 covering technology, a full engineering package, related services and industrial equipment for the revamping of the existing NPK plant using a pipe reactor. The upgraded plant is expected to be commissioned at the end of 2014.

VICTORIA GROUP

Elixir Group is not the only party investing in fertilizer production facilities in Serbia. Victoria Group has continued to invest in the production facilities at Backa Palanka of its fertilizer-producing subsidiary Fertil. The complex produces around 100,000 tpa of compacted NPKs largely for local distribution. In 2011, the company began to package compacted fertilizers in 25 kg bags for the first time and launched a new branded product range known as NATURA which comprises a variety of NPKS grades.

In May 2012, construction began at Backa Palanka on a new facility for the grinding of raw phosphate. The main purpose of this facility, built at a cost of €1.7 million, is to reduce the granulometry and moisture content of raw materials before compacting into NPK.

Construction and equipment installation were completed at the end of October 2012 and two milling tests were undertaken the following month, first with Egyptian raw phosphate and then with Syrian raw phosphate. The raw phosphate granulometry was reduced to 0.125 mms and the moisture content to 0.7%. Milling capacity for both trials was undertaken at 15 tph. This facility is now used for grinding raw phosphate and other raw materials.

Open storage for finished products and open storage for hazardous and non-hazardous waste were built at the same time as the new grinding facilities. Expanding the existing storage capacity for finished products has led to a reduction of outdoor storage costs. The new storage area of 4,700 m2 has the capacity to store 5,000 tonnes of finished products. Currently, the total storage capacity at the plant amounts to 25,000 tonnes.