

General News

CSIR transfers essential oils technology in Northern Cape

An essential oils factory established in Onseepkans in the Northern Cape will have a long-term impact on poverty reduction in the region.

The new distillation plant for rose geranium essential oils is one of many projects funded by the Department of Science and Technology (DST) to create sustainable jobs for communities plagued by high rates of unemployment. The CSIR is the implementing agency. To date, the project has created jobs for 34 previously unemployed people in this geographically-isolated town.

Opening the distillation plant, Minister of Science and Technology Mr Mosibudi Mangena said the achievements made so far by the essential oil projects have had a positive social impact on the beneficiaries of the projects. "It is in this context that the DST and the CSIR are delighted to launch the Northern Cape Essential Oils Cluster."

The well-drained soil, abundant sunlight and constant availability of irrigation water from the Orange River make Onseepkans an ideal site to cultivate rose geranium, says Engeli Beukman, project manager at the CSIR's Technology Transfer for Social Impact office. An added value is the technological know-how the CSIR has transferred to the community.

Essential oils are volatile components of aromatic plants, which are usually extracted from the leaves and flowers of plants through steam distillation. Typically, it is used in perfumes, cosmetics, household fragrances, as well as in food and beverage flavourings. South Africa's various micro-climates are well suited for growing essential oils such as lemon grass, lavender, peppermint, rose geranium and indigenous plants such as buchu and *Lippia javanica*.

Mr Mangena said the DST has undertaken to transfer technologies for job, wealth and SMME establishment to communities. A 2004 report on essential oils indicates a global market for essential oils of more than R6 billion. The major consumers are the US (40%), Western Europe (30%) and Japan (7%), and trade in essential oils and related products is increasing at roughly 10% per year, according to the United Nations Trade Statistics.

Thirty hectares of rose geranium have been planted and workers have been trained in all aspects of running an agro-business, including technical procedures relating to steam distillation, a special type of distillation that allows the isolation of essential



Aurelia Jonas of Sidasoas shows Science and Technology Minister, Mr Mosibudi Mangena, the ropes in the distillation factory

oils from any component of a plant, but typically the leaves and flowers.

A section 21 company, Sidasoas, has been established as the legal entity through which the Onseepkans community will run its business. The members and directors of Sidasoas all come from the Onseepkans community.

A similar project at Pella, not far from Onseepkans, is the second leg of the Northern Cape essential oils cluster and is run by Pelsan, a Section 21 company. This operation is of similar size and a distillation plant will be constructed there in the near future.

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