12. Development trends and pressures

The major pressure points for development are –

- Around Krugersdorp, which sees natural continuous urban expansion as this town grows. Because of the fact that Krugersdorp is the highest order urban centre in Mogale City comprising the higher order goods and services, as well as the fact that it has a strong functional linkage with Johannesburg, this area naturally attracts the bulk of development pressure in the municipality.
- The Muldersdrift area is an area that over the years has begun to experience more and more development pressure, especially as development in Johannesburg moved further outward. The Muldersdrift Spatial Development Strategy of 1997 identified various land use zones to on the one hand accommodate development pressure and on the other hand preserve the rural character of certain parts of this area. The Muldersdrift area is probably the area that will in future experience the greatest level of conflict between various planning and development agencies. One the one hand this area lies directly in the path of development while on the other hand it falls outside the 2007 Urban Edge demarcated by Gauteng Province. The area to the west of the N14 also falls inside the new proposed buffer zone which has been drawn around the Cradle of Humankind World Heritage Site.
- The area around Lanseria Airport on Mogale City’s side is currently still considered to be rural in nature. However, the City of Johannesburg has demarcated this area as a major new industrial, mixed-use and residential node, and the provincial government is also looking at a major development initiative (named the Lanseria Aerotropolis) around the airport. The energy resulting from this initiative will create pressure for development on Mogale City’s side.
- The Hekpoort, Magaliesburg and Tarlton areas experience very little development pressure as such. However, one of the aspects that do place pressure on these areas are the existence of informal settlements around these towns, which means that pressure begin to emerge for the formalisation of these informal settlements into formal townships. A number of housing initiatives are already underway in these areas which in turn require the development of supporting social facilities.

A spatial representation of all recent development applications in Mogale City shows a clear concentration of developments around the following areas:

- In Muldersdrift around the Muldersdrift Node (the Drift).
- In the vicinity of the intersection of Hendrik Potgieter Road and the N14.
- In the vicinity of the intersection of Robert Broom Drive and the R28.

13. Constraints to spatial development

The following main constraints exist in Mogale City that has an impact on the spatial structure and the development potential of the municipality:

- The central part of Mogale City is characterised by a band of dolomite that runs roughly in a south-west/north-east direction through the municipality. These dolomite areas are the natural feature that gave rise to the cave formations that led to the creation of the Cradle of Humankind World Heritage Site.
- The Gauteng Urban Edge, 2007 has been drawn conservatively around existing urban areas, and virtually no provision has been made for urban expansion.
- The Cradle of Humankind affects relatively small parts of Mogale City, and as such does not place a significant constraint on urban development and land use in Mogale City. However, the proposed new buffer zone around the Cradle of Humankind covers a large part of Mogale City, and therefore begins to place a constraint on the development potential of the area. As the Environmental Management Framework for this area has not yet been completed, there is no indication of the nature or intensity of land uses that will be permitted in the buffer zone and hence the exact impact on development potential is uncertain.
- **Natural elements** such as mountains, ridges, rivers and conservation areas are constraints to physical development in the sense that linkages between developments are often broken by the natural elements. However, the existence of the natural elements in the area are a positive spatial characteristic of the area, and ways must be found to accommodate and protect these while at the same time finding the most efficient and sustainable solution to urban development.

- The **mining belt** (including the radiation levels and environmental buffer zones) that runs through the south-eastern part of Mogale City poses a constraint for the functional integration of the urban areas on either side thereof. More particularly, because the areas to the south are predominantly disadvantaged areas and the areas to the north are the established urban areas of Krugersdorp, the mining belt poses a constraint to socio-economic urban integration.

- The **availability of engineering services** in the Muldersdrift and Lanseria area will prevent any development in the short to medium term, depending on when major engineering infrastructure investment take place in this area.