

RESTORATION TO PRODUCTIVE LAND USE

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Iluka Lanka Resources has mineral resources within the Puttalam District of the North Western Province of Sri Lanka and is in the early stages of development of the Puttalam Mine and Industrial Development Project. Iluka Resources Limited (Iluka) is the parent company of Iluka Lanka Resources, based in Western Australia.

For over 60 years, Iluka has operated and continues to operate mineral sands mines and processing facilities across a range of environments. During this time Iluka has rehabilitated over 12,000 hectares of land in Australia and the United States, restoring former mine sites to native vegetation to protect and reinstate biodiversity, but also restoring to productive agricultural use where appropriate. Restoration and rehabilitation to productive land use is thus a major focus for Iluka and a significant, ongoing part of the company's activities.

Successful rehabilitation of land requires a defined end-land use that is agreed with the land owner. This allows planning of rehabilitation and mine-closure, which occurs before mining starts. In addition, technical ability and scientific knowledge to implement the agreed land use is required. Iluka takes a multidisciplinary approach to rehabilitation, applying knowledge from fields such as soil science, vegetation ecology and hydrology, among others, together with its technical ability in mine planning, survey and engineering to achieve the agreed land use. Where gaps in knowledge about a particular rehabilitation concern exist, Iluka forms partnerships with leading universities to undertake scientific research to support rehabilitation planning and activities. Examples of these activities undertaken across the range of environments where Iluka operates are described below.

Productive agricultural land has been successfully restored by Iluka in operations in Western Australia (WA), Victoria, and in the United States. At its former mine site of Yoganup West in the south west of WA, careful planning ensured that soil

materials were handled correctly to reinstate functional soil profiles for pasture production. Detailed hydrological design of the post-mining topography improved drainage, reducing winter water-logging of soils that limited agricultural production. Hydrological design also improved the degraded watercourses that traverse this agricultural landscape, with enhancement of biodiversity through planting of native vegetation.

Rehabilitation of native vegetation has been successfully achieved at many Iluka sites, including operations that occur within nature reserves such as Eneabba in the Mid West of WA and Jacinth-Ambrosia (J-A) in the Eucla Basin of South Australia. Iluka’s operations at J-A, occurring within the Yellabinna Regional Reserve, progressively rehabilitate this arid region’s native vegetation while mining is in progress. Careful identification and stockpiling of different soil materials allows reconstruction of a soil profile to support the native vegetation that is re-established. Knowledge gaps in rehabilitation such as the water use of deep rooted vegetation and the genetic diversity implications of sourcing native seed continue to be addressed by research partnerships with the University of Adelaide.

Research partnerships addressing rehabilitation concerns are also a feature of other Iluka operations. Iluka sponsored the Iluka Chair in Vegetation Science and Biogeography and The University of Western Australia to research the restoration of areas of kwongan heathland near its Eneabba operations. Kwongan heathland is a globally significant vegetation known for its biodiversity.

The examples above illustrate Iluka’s commitment to rehabilitating land to the needs of the land owner, be that the return of native vegetation to protect and reinstate biodiversity or to restore productive agricultural land use. Iluka undertakes these activities using a multidisciplinary approach and the best practices available, and where appropriate, addressing knowledge gaps through research partnerships to increase scientific understanding.