MANNAR ISLAND HEAVY MINERAL SANDS PROJECT

UPDATE ON MEDIA COVERAGE AND FAQs

SUMMARY

In response to recent media coverage, Titanium Sands makes the following points:

- **The Company has not mined, and is not mining, mineral sands on Mannar Island nor does it have any plans to do so until all necessary approvals have been received;**
- **The Mannar Island exploration licences and the Company's associated work program have been approved by the Sri Lankan Geological Survey and Mines Bureau (GSMB). All licences remain in good standing;**
- **The Company does not intend to mine any of the coastline of Mannar Island. Previous preliminary investigations of heavy mineral sands in these areas indicated concentrations too limited to warrant further consideration;**
- **Comprehensive environmental studies will be conducted to assess potential impacts on Mannar's coastal fisheries and the Vankali Nature Sanctuary. The Company is firmly of the view that both are of a sufficient distance from the proposed Project area to not be at risk;**
- **There is no expectation that Mannar Island might "sink" as a result of mineral sands mining activities. The reformed land surface may actually be higher post-mining;**
- **The economic benefits expected to flow to Sri Lanka and the local communities of Mannar Island from development of the Project should be no less than those that flow from mining developments in other parts of the world, including developed nations such as Australia.**

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OVERVIEW

The Mannar Island Heavy Mineral Sands Project is an exploration stage project located on the 26km by 6km wide Mannar Island in north west Sri Lanka. The island is joined to the mainland by a 3km long road causeway, rail and power infrastructure. Titanium Sands Ltd has been exploring and defining areas of heavy mineral sand concentration on the island since December 2018. Exploration has involved shallow hand auger drilling and light mechanised drilling, both of which have very low to zero environmental impact.

In June 2020 Titanium Sands released to the ASX a scoping study (ASX announcement 16th June 2020) outlining preliminary concepts for the project based on an area of the identified heavy mineral resources 1km to 2km wide and up to 8km long located between 1 and 3km from the nearest coast of Mannar Island.

The project is at an early stage and is being progressed under exploration licences that were granted on the basis that the proposed exploration activities should not have a detrimental impact on the environment. Any mining or major development project in Sri Lanka must move through numerous regulatory steps, including demonstrating compliance with the Sri Lankan Environment Act and a public consultation process. Granting of a mining licence, terms of investment, export licences, operational licences and other regulatory compliance can only occur once the project has been sufficiently defined by studies that include comprehensive environmental impact and management assessments.

Since March 2020 Sri Lanka has like the rest of the world been dealing with the COVID-19 pandemic. The Sri Lankan government response has been exemplary and the country has experienced relatively low levels of infection and death. However, a recent increase in positive cases has prompted the re-imposition of restrictions on domestic travel including to and from Mannar Island. The situation remains uncertain but it is hoped exploration will be able to recommence before travel restrictions are fully lifted.

RESPONSE TO QUESTIONS RAISED ON SOCIAL MEDIA AND IN RELATED MEDIA REPORTS

Over the past six months, the company has been made aware of social media postings and media coverage on the Mannar Island Project that have contained factually incorrect information and misleading statements. Where possible, the company has sought to engage with the individuals and outlets responsible to provide correct information and seek ongoing cooperation.

On Sunday 13 December, Radio National's "Science Friction" program aired a half-hour podcast on the project:

https://www.abc.net.au/radionational/programs/sciencefriction/12975178

The social media posts, media reports and the ABC Radio National broadcast have raised questions about the project. In the interests of preventing the further circulation of factually inaccurate information, the Company has sought to provide clarity around these questions below:

Q: Is the Company mining mineral sands illegally on Mannar Island?

A: No, the Company is not mining mineral sands illegally on Mannar Island; it is currently not mining at all and never has. The Project is at an early exploration stage and until the recent COVID-related halt in activity, work on the Exploration Licences had been carried out in compliance with licence conditions and with little to no impact on the environment.

Q: As a foreign company, is Titanium Sands Ltd allowed to hold or transfer exploration licences in Sri Lanka?

The corporate structure under which Titanium Sands' Mannar Island Exploration Licences are held is compliant with Sri Lankan law and regulation. The exploration licences are held by Sri Lankan companies wholly owned by Mauritian companies in turn owned by Titanium Sands. Ownership of *mining licences* is subject to different requirements and foreign majority ownership and project investment and development is subject to application.

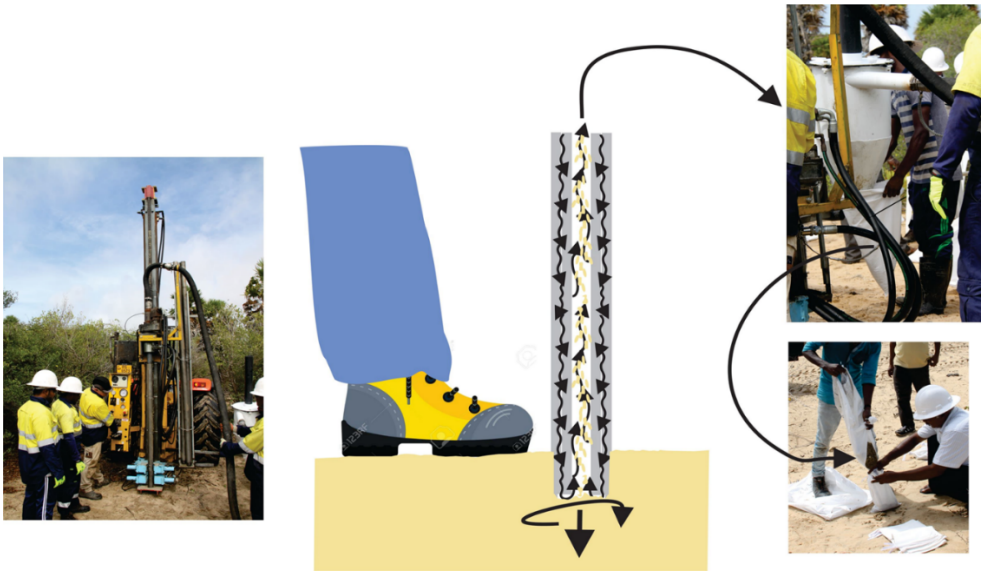
Q: Is Titanium Sands Ltd being investigated by a committee formed by the Sri Lankan Ministry of Industries?

No, the Company is not being investigated by a committee formed by the Ministry of Industries. In response to incorrect social media posts and related media reports, the Ministry of Industries sought information about the Mannar Island tenure from Titanium Sands Ltd in-country representatives. The Company and its Sri Lankan legal advisors have provided information to the Ministry of Industries and confirmed the information already on record that the licences and corporate structures are in compliance with Sri Lankan law.

Q: Could exploration activities on Mannar Island damage the environment?

Exploration activities to determine the distribution of heavy minerals on the island consist primarily of hand auger and light machinery drilling, both of which have little to no impact on the environment. These activities are being carried out in areas of no habitation and no formal agricultural development. Access to private land areas has been with landowner permission.

Local team drilling hand auger exploration holes on Mannar Island.



Light machinery drilling and local drilling crew Mannar Island.

Q: Will a long-life heavy mineral sands mining operation on Mannar Island displace communities and destroy areas of agriculture?

Titanium Sands is of the view that the development of the project will be positive for the communities of Mannar, with the mine itself offering long-term stable employment and plans to develop locally owned and operated commercial plantations as part of the rehabilitation process after mining.

Lagging economic development in the northern parts of Sri Lanka has been one of the many legacy issues from the protracted civil war and the Project has the potential to help in addressing this.

If the Project progresses to production, development would only occur in areas where there is no active agriculture or habitation. The Project will not displace any communities.

Q: Areas of heavy mineral concentration have been found by exploration drilling over large areas of Mannar Island including along the coast. Does this mean that most of the island will be mined?

No, any development will be focused on a much smaller area. The purpose of exploration on the island has been, first and foremost, to identify areas of heavy mineral concentration. Subsequent investigations starting with a scoping study develop concepts in relation to where it may be technically, environmentally and economically possible to extract those heavy minerals.

The Mannar Island scoping study released in June 2020 identified an area of heavy mineral concentration 8km long and 1-2km wide in the interior of the island within which a heavy mineral sands mining operation may be feasible. This could result in mineral sand recovery operations – and development of commercial plantation agriculture in the post-mining rehabilitation process – growing to over 320 hectares over the course of 20 years, or double that if the project ran for 40 years. These potential scenarios represent just 2.5% and 5% respectively of the Mannar Island landmass, which totals 13,000 hectares.

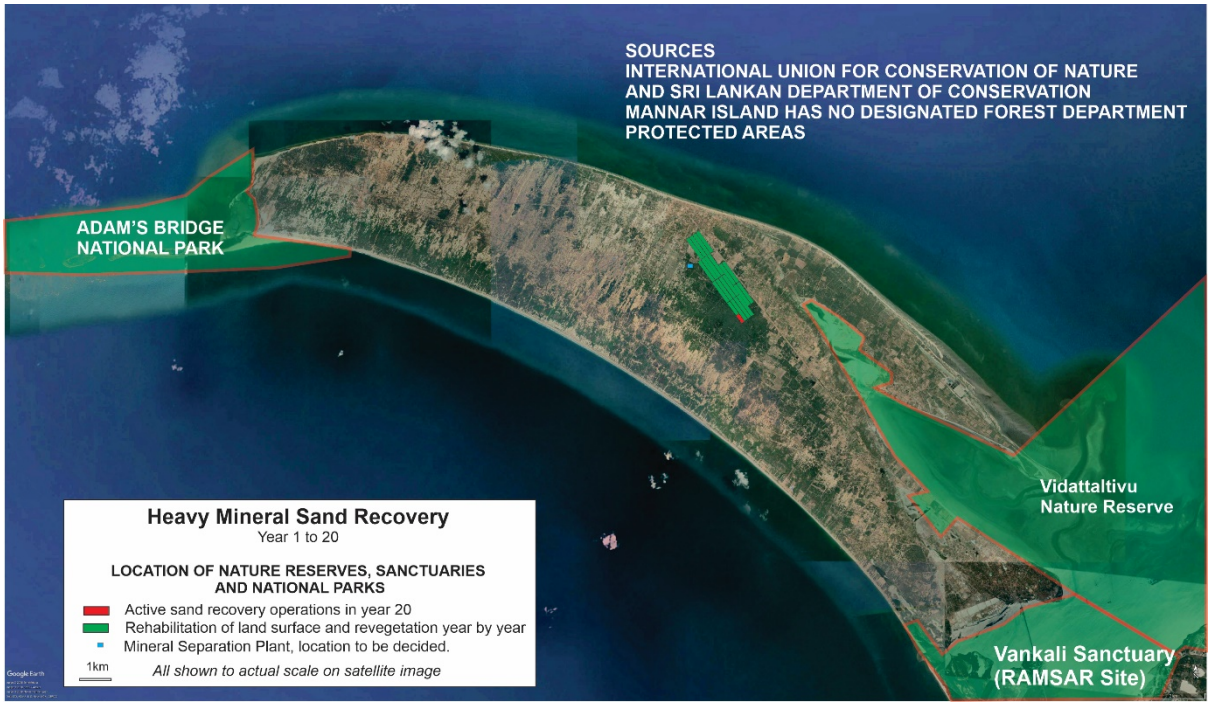
Q: Will the project destroy the fishing industry and coastal ecosystems of Mannar island?

As clearly stated in the scoping study announcement, the project concept is for an operation that is located 1-3km inland from the coast and only in areas not subject to commercial agriculture or areas of habitation.

Q: Will the Project have a detrimental impact on the Vankali Nature Sanctuary, a RAMSAR-designated wetland area between the eastern end of Mannar Island and the mainland shore?

Titanium Sands has no intention of pursuing a project that potentially impacts a RAMSAR-designated area and will undertake comprehensive environmental impact studies, as are typical in the mining industry, to ensure that any risk is properly addressed.

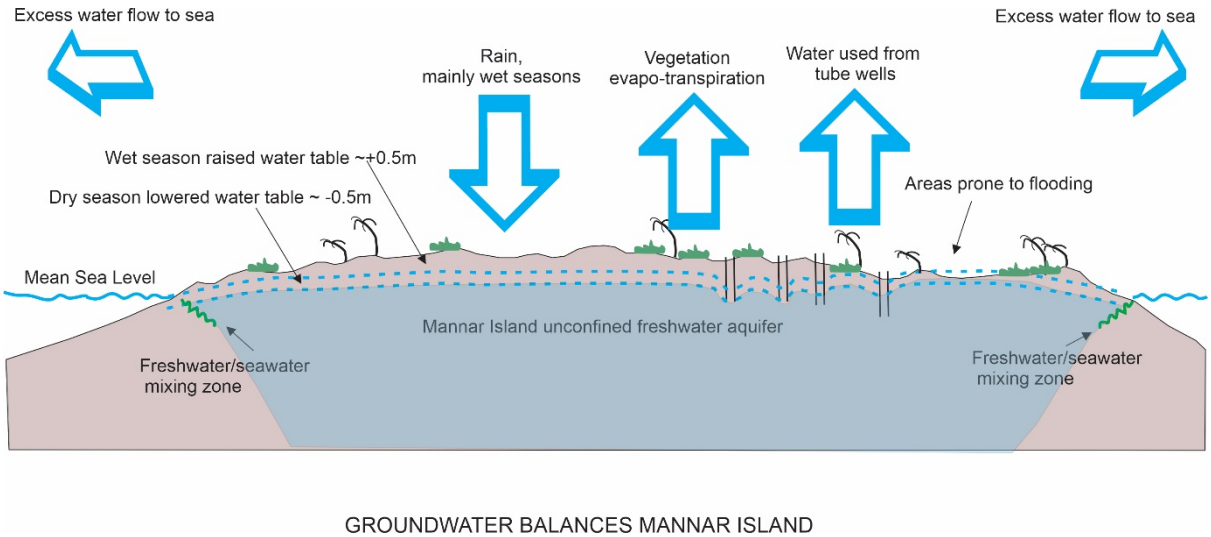
The Vankali RAMSAR area is 10km from the Project area. Even if the Project was to double in scale, it can expand no further than to within 5km of Vankali due to the location of the Mannar Town settlement at the eastern end of the island and immediately adjacent to the Vankali Sanctuary.



Google Earth image annotated with the location of the Vankali Sanctuary (RAMSAR designated site) and the Adams Bridge National Park. The area shown as representing 20 years of heavy mineral sand operation and continuous concurrent rehabilitation is notional and does not represent actual predictions of area or precise location.

Q: Mannar Island is located in the dry north-west of Sri Lanka and receives only around 1,000mm of rain per year. Local communities need access to water from shallow tube wells. Will this be affected by mineral sand operations?

A: The water table on Mannar is encountered at shallow depths typically 2-3m below the surface in the interior of the island. In low-lying parts of the island and close to the coast areas can be inundated when wet season rains cause the water table to rise up to 50cm from its normal levels. A schematic illustration of the Mannar groundwater balance is illustrated below.



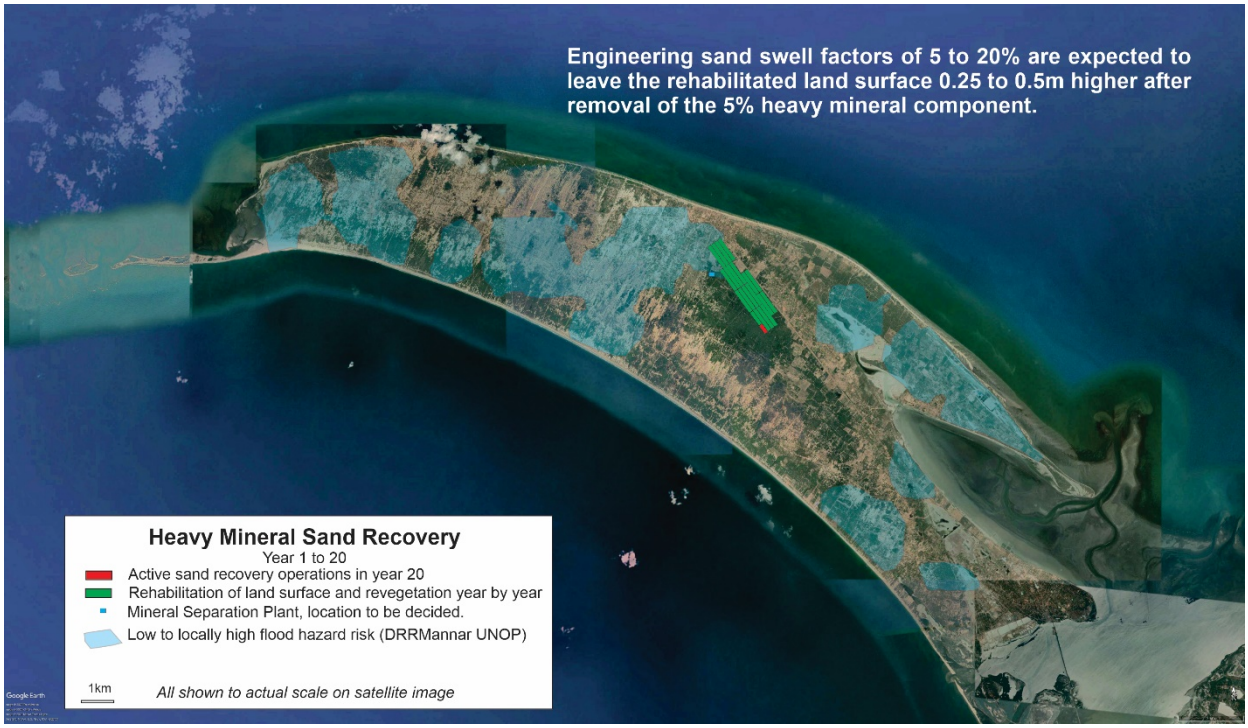
GROUNDWATER BALANCES MANNAR ISLAND

The groundwater under Mannar island is generally potable but with unhealthy levels of dissolved solids. However access to it through shallow tube wells is critical for local communities. A dredging heavy mineral sand operation as conceived for the Mannar island Project would operate on a closed water cycle with any water passed through the dredge and floating primary concentrator returned immediately to the dredge pond. The level of water in the dredge pond would be maintained to ensure no disturbance to the ground water levels in community tube wells or elsewhere. With a lack of clay in the sands being processed and no chemicals necessary in the process, there will no effluent streams to affect the ground water quality.

While the annual rainfall replenishment of the ground water in this dry zone of Sri Lanka is around 1,000mm, this is considerably more than rainfall replenishment in a number of Australian mineral sand dredging operations where impacts have been successfully managed over many years of operations.

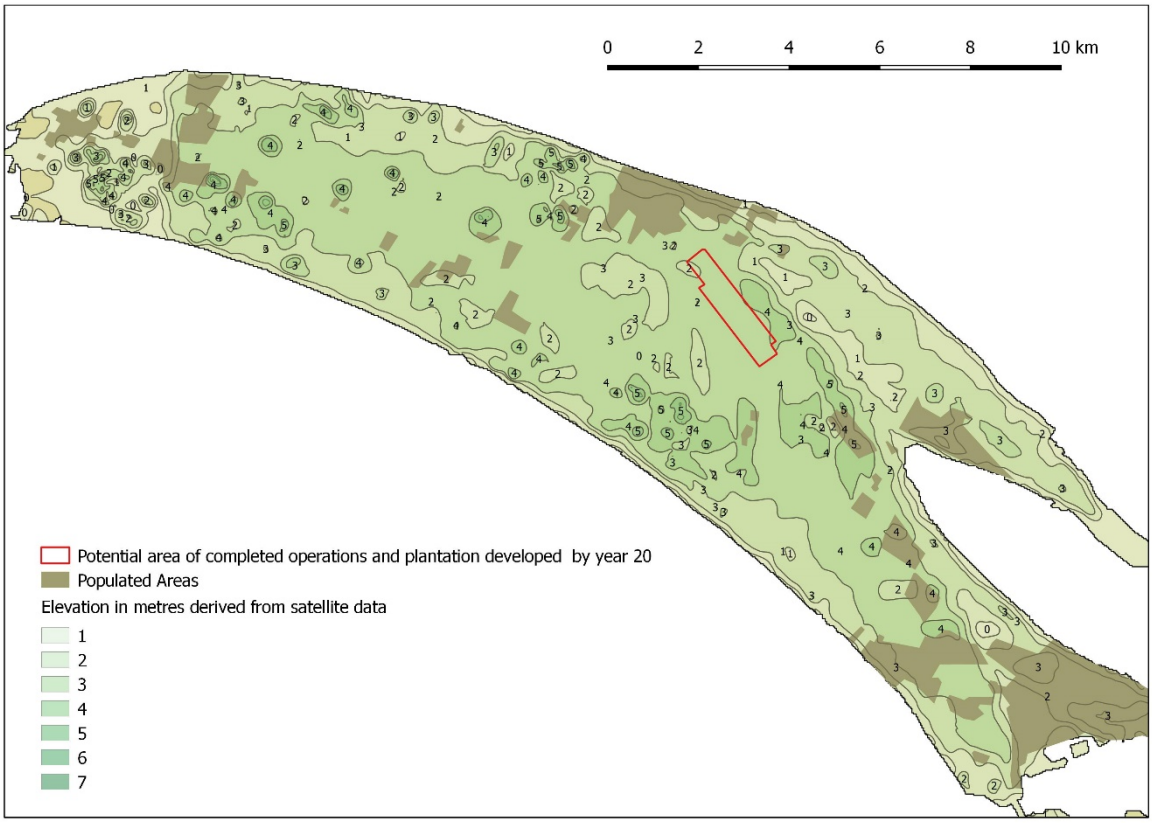
Q: Mannar Island is a low-lying island with large areas at or close to sea level subject to flooding. Will this be made worse by sand removal lowering the island?

A: There is no expectation that Mannar Island will "sink" as a result of mineral sands mining activities. Heavy mineral extraction, as envisaged by Titanium Sands, would involve the removal of less than 5% of the sand treated. The remaining 95%+ of sand is immediately returned to the ground as an initial stage of re-establishment of the pre-mining landforms. Considering the swell factors when material is disturbed and redeposited, the reformed land surface will be at around pre-disturbance levels or slightly above. The figure below is a Google Earth image annotated with areas of low to high flood risk determined by the District Secretariat and UNDP development plan for Mannar District (2017-2021).



Low to high risk flood areas shown in blue relative the conceptual area of a mineral sands operation.

The area of potential operations identified in the Titanium Sands Scoping Study is located outside the flood risk zones as also indicated by the Digital Terrane Model (DTM) developed by the company from satellite data below.



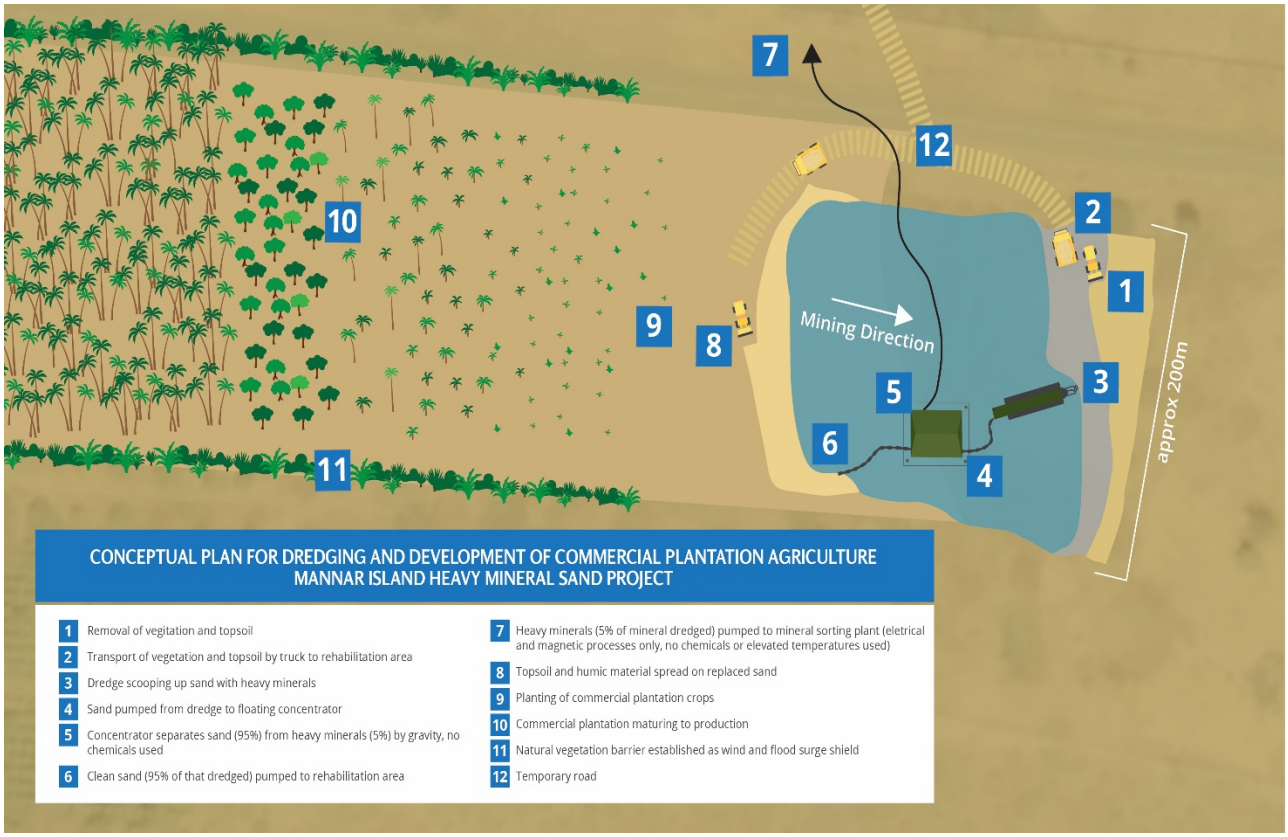
Q: Mining operations generally have to stockpile large volumes of barren material to get access to the underlying minerals. Is this not problematic for the project?

The areas of heavy mineral concentration considered for mining in the Mannar Island scoping study come to the land surface. There would be no barren overburden to deal with.

Q: How does a dredging operation in the middle of Mannar Island recover the 5% of the sand composed of heavy mineral grains and does this create large areas of disturbed ground?

The scoping study indicated that a dredging operation in a contained progressive pond was likely to be the most environmentally and economically effective means of recovering heavy minerals from the Mannar Island Project. It will allow for continuous and near contemporaneous rehabilitation of the disturbed surface for the development of commercial plantation cropping and regenerated corridors of protective natural vegetation.

Illustrated below is the sequence of pre-mining soil collection (1 and 2), dredge and heavy mineral extraction (3,4,5), replacement of 95% of the sand in the dredge void (6), replacement of the saved topsoil and organic matter (8), planting of prepared young coconut palm, nut bushes and other locally suitable commercial plantation crops (9), maturing plantation crops approaching commercial stage (10), replanted indigenous vegetation zones planted to protect the commercial plantations and enhance the local ecology.



Q: Large areas of the inland portions of Mannar Island are covered by thorn scrub, bare sand and naturally occurring palmyra palm. Given that palmyra palm is used by villagers for firewood, thatch material and as a food source, will the Project destroy this important resource?

No, mature palmyra palm have the potential to form part of the rehabilitation of the post-mining land surface to sustainable plantation agriculture. Transplanting of palmyra palm from in front of the mineral sand operation to the rehabilitation areas would enhance the early productivity of the developing commercial plantings. Mechanical transplantation of mature palms is an established practice in many places around the world. Transplanting trials would be carried out as part of the coconut palm and other commercial crop trials that will be carried out by local expert agronomists.

Google Earth image of sand, thorn, scrub and palmyra palm in the interior of Mannar Island

Palmyra palms standing amongst thorny scrub and bare sand interior of Mannar Island

Palmyra palm fronds used as a fence, Mannar island .

Q: Minerals in Sri Lanka are owned by the state, their exploitation is governed by the mining act and the environment act. What economic benefits are there to the country and the local communities if an Australian mining company were to develop a heavy mineral sand operation on Mannar island?

A: Governance of mining in Sri Lanka does not differ materially from Australia or other countries with mature mining industries. Heavy mineral sands are subject to royalties payable to the Sri Lankan Government. The amount of the royalty is dependent on the particular mineral and if it is exported, and ranges from 4% to 5%. A mineral sands operation would pay corporate income tax on profits earned. The contribution to Sri Lanka's balance of payments if the product were to be exported would be substantial. Export earnings from this project alone could increase the value of mining products exported from Sri Lanka by several times.

The project could employ between 200 and 600 people depending on the ultimate scale of the project. Indirect job creation in local services for a project such as this could be a multiple of the directly employed people. Over 95% of the work force would be Sri Lankan and most from Mannar Island and the Mannar District. This would be supported by training

and specialist re-skilling of already skilled persons. These would be quality, well-paid, long-term jobs.

The economic benefits to the local population from the rehabilitation concept of developing large areas of sustainable locally appropriate commercial plantation agriculture are substantial. From the commencement of the project the development of commercial plantation agriculture would follow the heavy mineral operations in a continuous process potentially generating in excess of 10 hectares per year of plantation development per year for the life of the project. This will employ local people in the development of the plantations paid for by the project. As the plantation areas mature to where they start producing they would be owned and operated by local communities and landowners.

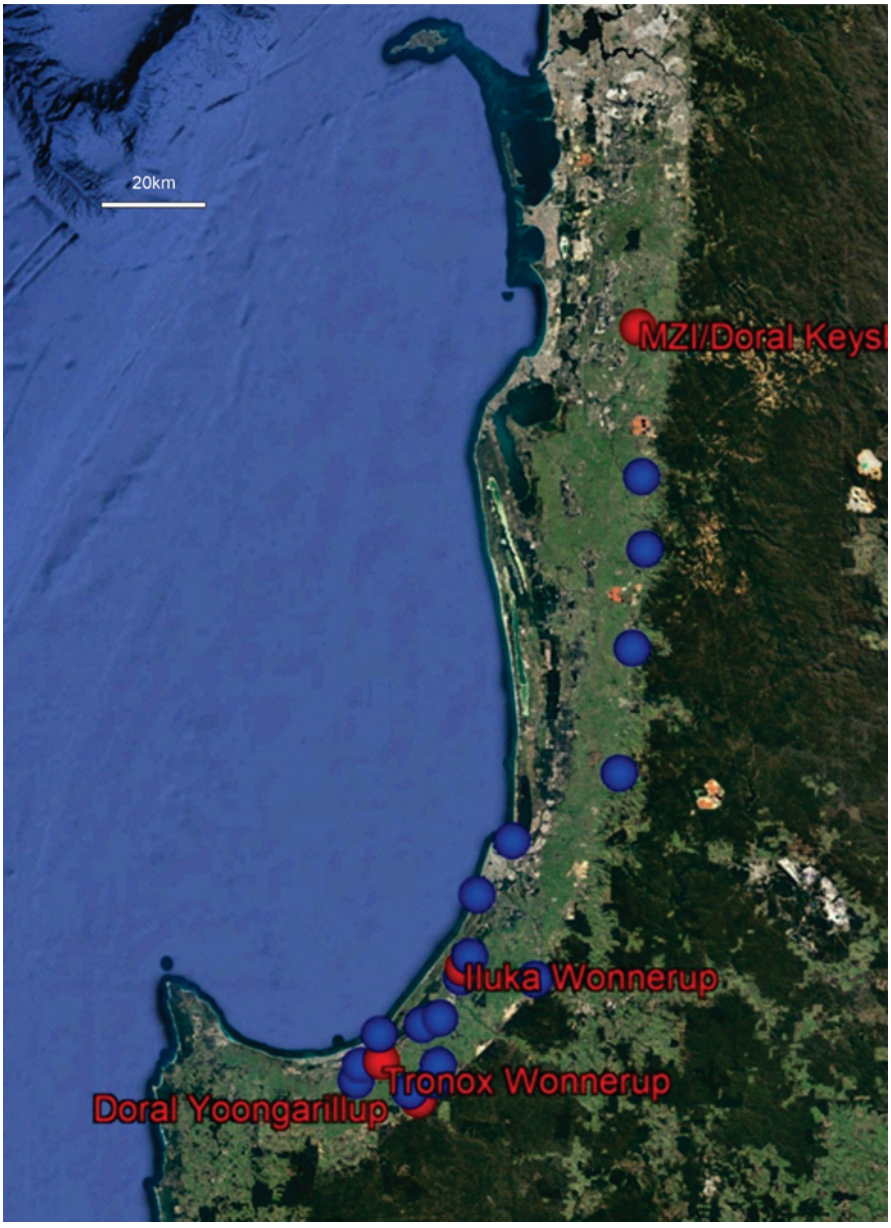
Q: Although not subject to formal agricultural development, areas of the interior of Mannar Island are held under private ownership or used for traditional foraging by villagers. How will they be affected by the proposed mineral sands operations?

A: Access to minerals in Sri Lanka is subject to agreement with landowners and it is not intended that mining and exploration companies acquire ownership. Titanium Sands would seek to reach agreements that would encompass the concept of development of commercial plantations at no cost to the landowner and sustained at project expense until they are approaching commercial maturity from around three years after the mining has advanced through the landowner's property. Similar development concepts could be advanced with government and community approval to areas of traditional village foraging areas. These areas could similarly be returned within three years as they approach commercial production. Both private landowners and local communities would benefit from having undeveloped land turned into productive plantation at no cost. It may also be possible to engage the landowners and local villagers to do the plantation development over their areas.

Q: Are there examples of rehabilitation to productive land use or stable ecological states after or during heavy mineral sands operations in Australia?

There are numerous examples of rehabilitation to productive agriculture or regenerated natural ecosystems after heavy mineral sand operations in Australia. These include the generation of post mining grazing, cropping including cereal crops, sugar cane plantations and other agricultural uses. In the south-west of Western Australia, there has been more

than 50 years of heavy mineral sand production at over 18 mining sites, of which two remain in production. The remainder have been rehabilitated to various natural and agricultural uses.

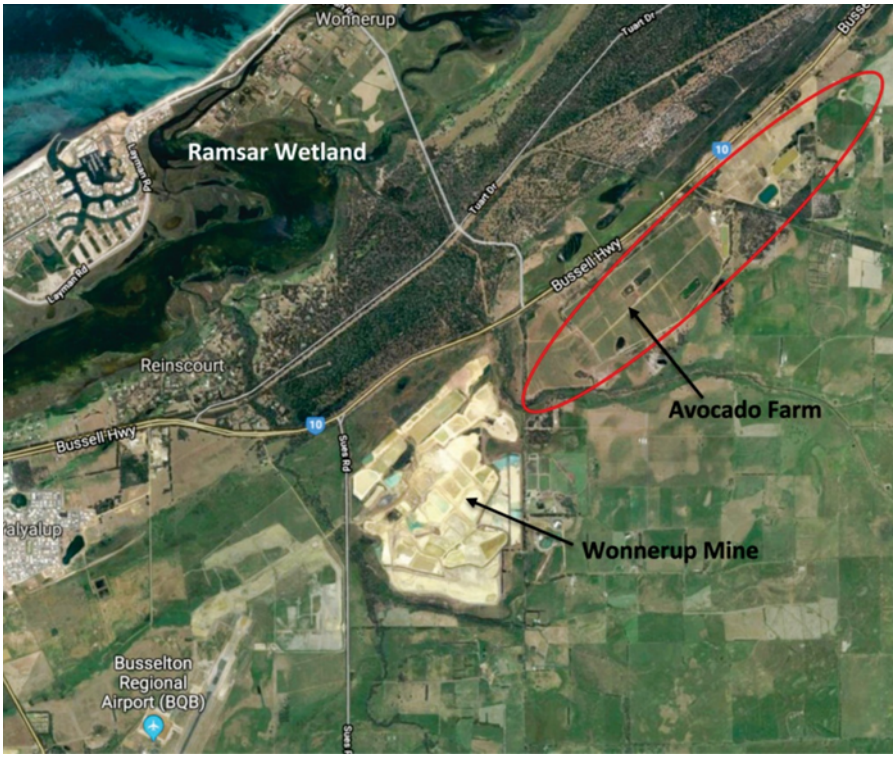


Mineral sands operations can co-exist with environmental reserves and high value agriculture because the environmental impacts are manageable, particularly water management. Water management in south-west Western Australia is critical since annual rainfall is only between 600 and 900mm per year.

- **Water used in the primary concentration of heavy minerals by simple gravity processes is recycled and there are no noxious chemicals that are discharged to the environment.**

- **Ground water tables can therefore be maintained at natural levels protecting sensitive nearby ecosystems and other ground water users, both agricultural and in the local population.**

- **Noise emissions are exceptionally low and do not impinge on nearby residential areas.**
- **Rehabilitation of operational areas to pre-operational or better than pre-operational conditions is possible because the recovered heavy minerals generally represent only 3-6% of the sand and the remainder is returned to reform the land surface.**
- **Reforming the land as operations progress laterally can be done to enhance the agricultural or natural value of the land through careful re-structuring of the soils profiles and optimising rainfall capture or efficiency of irrigation in the soil profile.**

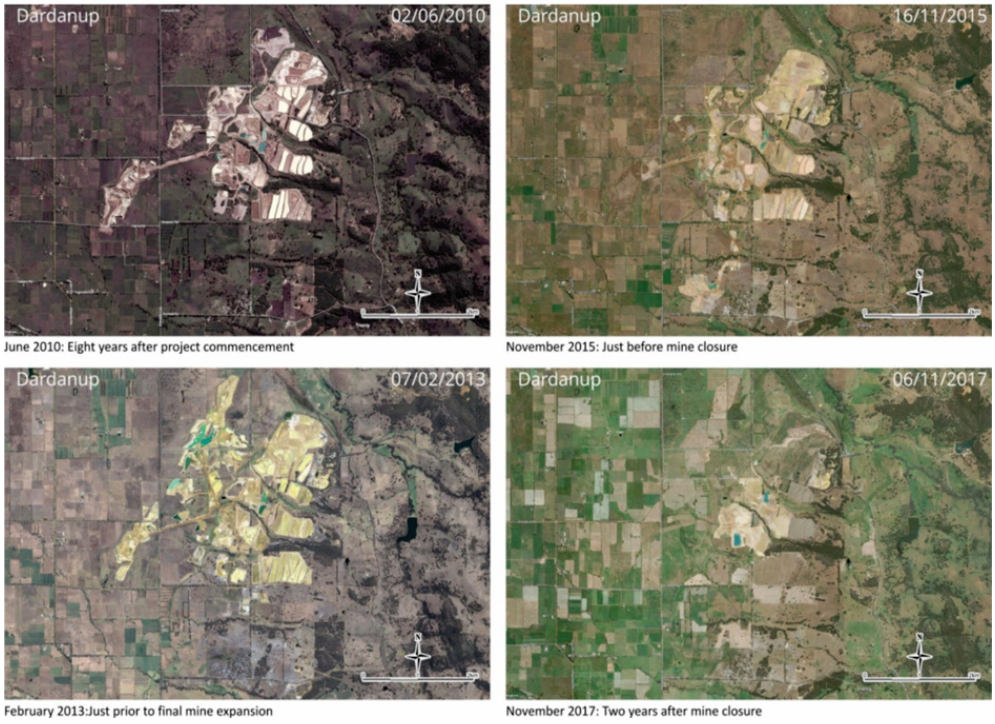


The Wonnerup Heavy Mineral Sand Operation adjacent to an internationally significant RAMSAR wetland, a major avocado farm and built up residential areas. SOURCE https://www.fingerboardsproject.com.au/about-the-project/rehabilitation/examples

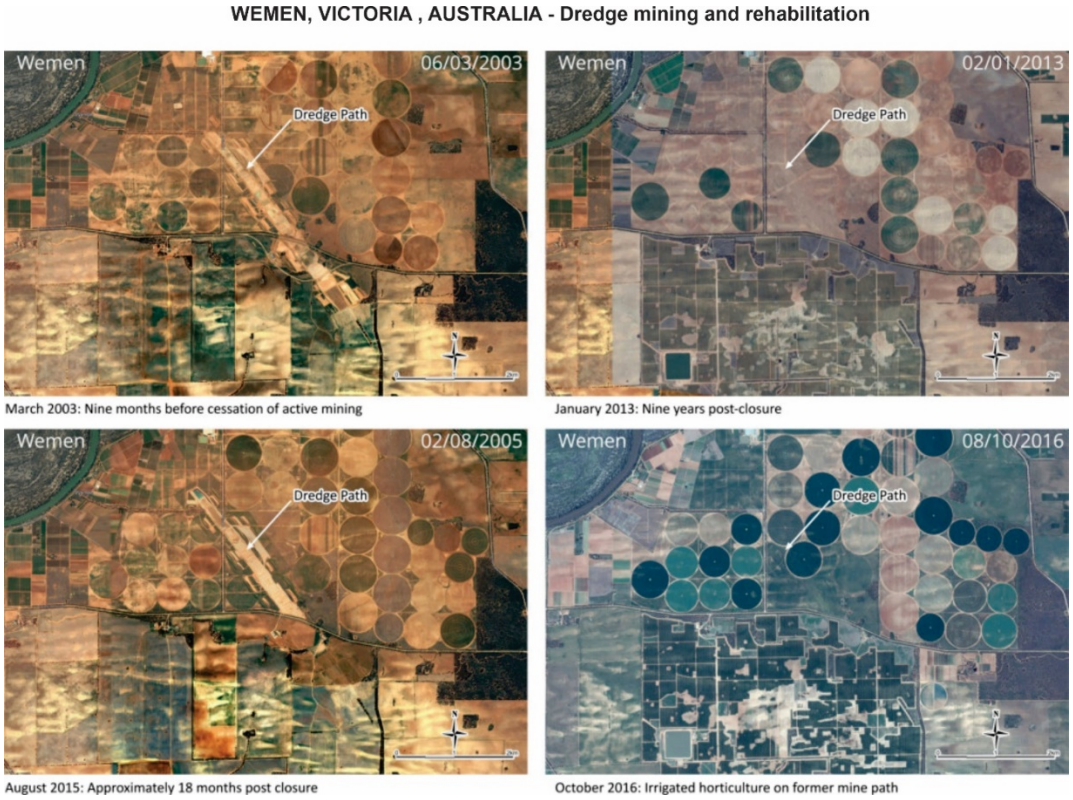
Rehabilitation is an integral part of heavy mineral sands operations. Collection and conservation of soils and organic matter from the land surface in advance of operations enhances the re-establishment of soils and vegetation on the reformed land surface as the operation moves on. Revegetation can be aimed at development of self-managing and

evolving natural systems or enhanced commercial land use or a combination of both. Rehabilitation has to be specific to the local setting and goals established with all stakeholders, landowners, and regulatory agencies.

Heavy mineral sand operational areas rehabilitated to natural systems and to cropping and grazing agriculture, South West, Western Australia.
SOURCE https://www.fingerboardsproject.com.au/about-the-project/rehabilitation/examples



Dardanup Heavy Mineral Project, Google Earth images at various stages of operation and rehabilitation.



Dredge heavy mineral sands operations and return to productive intensive agriculture in near Wemmen, Victoria, Australia.

SOURCE https://www.fingerboardsproject.com.au/about-the-project/rehabilitation/examples