## MADAS GAR LAND MADE

The capital city of Madagascar, Antananarivo, is a high-altitude city. Urban growth is rapidly changing the traditional landscape of the Merina culture dominated by rice cultivation in the plains, as informal settlements are increasingly occupying the agricultural ground. This uncontrolled growth also increases the demand for local bricks produced from soil mining, degrading the existing agriculture. In addition, backfills eat away at the city's capacity to manage flooding. As a result, the infrastructures coping with floods are no longer adequate. The proximity of rice fields to the informal settlements creates added difficulty for farmers to organize irrigation and to compensate the city's effluents on crops. Madagascar is one of the poorest countries in the world. These challenges bring an opportunity to construct a resilient and more sustainable landscape environment for the city, capable of integrating urban growth with measured flood management and sustainable food production.

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The Design Research Studio, supported by FCL, will propose a series of new designs for the agro-urban areas of Greater Antananarivo adapted to the present situation. The studio will aim for a bridging method between landscape design, engineering, and science to provide a more resilient habitat for citizens living under severe climate and socio-economic changes, focusing on local food production. Dealing with the divergent and amplifying extremes of flood and drought as part of the annual cycle of tropical climate with wet and dry seasons, the students will operate with enhanced capabilities of 3D point cloud modelling and digital design methods.

A field trip to Antananarivo from 22nd to 30th October 2022 is compulsory. The 'Integrated Seminar Week' will include studio-specific workshops and investigations on the design perimeter. The costs for studio students are 699 CHF. Places for non-studio students are limited, and costs higher. A passport with at least 6 months of validity is mandatory.

For further information: girot.arch.ethz.ch