



Soil Security Assessment of Tasmania

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The concept of soil security aligns well with the aspirational and marketing policies of the Tasmanian Government, where increased agricultural expansion through new irrigation schemes and multiple-use State managed production forests co-exists beside pristine World Heritage conservation land, a major drawcard of the economically important tourism industry. Regarding the Sustainable Development Goals (SDG's) this could be seen as an exemplar of the emerging tool for quantification of spatial soil security to effectively protect our soil resource in terms of food (SDG 2.4, 3.9) and water security (SDG 6.4, 6.6), biodiversity maintenance and safeguarding fragile ecosystems (SDG 15.3, 15.9). The recent development and application of Digital Soil Mapping and Assessment capacities in Tasmania to stimulate agricultural production and better target appropriate soil resources has formed the foundational systems that can enable the first efforts in quantifying and mapping Tasmanian Soil Security, in particular the five Soil Security dimensions (Capability, Condition, Capital, Codification and Connectivity). However, to provide a measure of overall soil security, it was necessary to separately assess the State's three major soil uses; Agriculture, Conservation and Forestry. These products will provide an indication of where different activities are sustainable or at risk, where more soil data is needed, and provide a tool to better plan for a State requiring optimal food and fibre production, without depleting its natural soil resources and impacting on the fragile ecosystems supporting environmental benefits and the tourism industry.