

ID ABS WEB: 138347

7. Soil sciences impact on basic knowledge 7.03 130893 - Soil classification: past and present concepts and solutions

PRONASOLOS – THE BRAZILIAN NATIONAL SOIL PROGRAM

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PronaSolos is the largest Brazilian technical-scientific program in the area of soils, whose objective is to carry out the largest pedological survey ever carried out in Brazil, as well as to perform the soil governance in Brazil. This is a Program to be performed over the next 30 years, with the following goals: i) define priority areas and the work agenda for carrying out soil surveys on geographic scales equal to 1:100,000 or more detailed; ii) carry out soil surveys and their interpretations; iii) structure and operationalise the national soil information system, with public access; iv) organise the existing soil data obtained from soil surveys; v) implement innovations in soil surveys methods and related topics. Currently, less than 5% has soil survey in a 1:1000,000 scale or bigger, as recommended in PronaSolos. The biggest part of Brazil (84%) is mapped at a scale of 1:250,000. The lack of information about soils in Brazil was already highlighted by soil experts as a crucial problem. Embrapa Soils is the leader of the Executive Committee. The first results were delivered in 2019 – the selection of the priority areas to be mapped in each State - followed by the web-technological platform of soils from Brazil launched in 2020 (<https://pronasolos.sgb.gov.br/dashboards/>), containing several maps and soil data from produced over the last 60 years. The main benefit of this platform is the availability of the collection of Brazilian soil studies and soil profiles, in a single location, from centralized and easily accessible way. In 2022 this platform was updated and a collection of Carbon Stocks Maps that gave support to FAO's Carbon Maps of the World. PronaSolos will provide soil information to the society and the results will benefit more than a dozen sectors such as agricultural insurance and credit, agroecological zoning and agricultural suitability of states and municipalities, land vulnerability to extreme events in urban and rural areas, among others.

Keywords: pedological survey, geographic scales, soil data