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## Identification of the socio-technical factors within geothermal exploration based on Plays with examples from Central America

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The development of geothermal exploration has benefited from the inclusion of exploration protocols based on geological Plays classically used in hydrocarbon exploration projects. Despite being a research topic in which many efforts have been devoted, it presents weaknesses when evaluating the role of the communities (the social dimension) during the exploration process. To address the lack of studies, a qualitative research has been carried out in Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panamá) to determine the necessary factors to be considered in the social dimension within the geothermal exploration based in Plays.

We have identified the social factors within each social dimension (demand, infrastructure, land access) and from this, a catalogue of the necessary activities required in the social dimension during the geothermal exploration process based on plays is proposed. The results of our survey will greatly contribute to the implementation of the Play-based exploration in geothermal projects because it reduces the risks associated in the initial phase of the exploration process and offers a step-by-step methodology that, when adapted to the needs of each country, can improve the efficiency of the current geothermal exploration protocols.