Neutrality: the global challenge facing science

According to science, the question of maintaining a viable planet everywhere and for all is ultimately raised and is no longer the prerogative of a single ecological concern. In the last frontiers, in the still living ecosystems where entire communities depend on natural resources, the land is under attack by various human and natural factors that threaten its tipping points towards irreparable degradation. This is the case, e.g., of oasis agro-ecosystems in drylands, a kind of advanced sentinel on the desertification frontline and an indicator of resilience for several hundred years. Scientific knowledge to address this situation exists to a large extent, but it is fragmented across disciplines, as are the public policies about it, where they exist. The time has come for an urgent new articulation and renewed scientific inspiration. More holistic, and that combines more science with more awareness. And who would, for example, award the Nobel Prize to the thousands of farmers who reproduce and conserve the world seed diversity instead of assigning them to courts! Neutrality of land degradation is not a target of the SDGs like any others, because it is at the root of the achievement of many other SDGs. And more broadly as a sine qua non condition for achieving the objectives of the three Rio conventions. Therefore, the three dimensions of neutrality, namely "avoid, reduce and restore", highlighted by the work of the SPI, must be addressed simultaneously. And not in a fragmented way, contrary to a strong trend to prioritize the restoration of degraded lands at the expense of the other two dimensions. In a context where many scientific as well as ecological (agroecology), social (rights, governance) and economic issues (business model, benefit sharing, poverty alleviation) are at stake and remain to be clarified, the other two dimensions of neutrality - avoidance and reduction - may offer at least as much or even greater potential, with less collective risk and probably at lower cost. This is an area where science must shed light and go beyond the observations by proposing modalities and options where neutrality also aims at the life and even the survival of a large number of humans.