

Solving Extended Linear Complementarity Problems (XLCP) - Wood and Environment

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Abstract : The objective of this work is to establish theoretical and numerical conditions for Solving Extended Linear Complementarity Problems (XLCP), with emphasis on the Horizontal Linear Complementarity Problem (HLCP). Two new strategies for solving complementarity problems are presented, using differentiable and penalized functions, which resulted in a natural formalization for the Linear Horizontal case. The computational results of all suggested strategies are also discussed in depth in this paper. The implication in practice allows solving and optimizing, in an innovative way, the (forestry) problems of the value chain of the industrial wood sector in Angola.

Keywords : complementarity, box constrained, optimality conditions, wood and environment

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