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Improving the Date Production Chain in the Moroccan Oases through Small Mechanisation Inputs to Support the Governmental Development Strategies

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Abstract

Moroccan oases as other Saharan oases are a highly artificial ecosystem that has proved to be capable of sustaining agriculture under arid climatic conditions for centuries, though it has suffered a strong degradation process during the last decades. This is due to a complex phenomenon linked to socio-economic, political and climate changes, that has brought traditional oasis agriculture to lose its relevance, consequently putting its complex environment in serious danger. The most important factors of degradation of the agricultural system are: land and water scarcity, salinity, silting and the negative impact of various pests and diseases (the most dangerous of which is Bayoud). Small farmers are the most important resource for the surviving of the oasis ecosystem but, on a socio-economic point of view, oasis dwellers, especially the younger ones, tend to search for better livelihood opportunities elsewhere, with consequent loss of traditional knowledge and availability of labour for all agricultural operations.

Date palm cultivation is the most important crop in this environment but date production faces several problems along the whole chain (field operations, storage, processing and marketing phases) and the oldest groves are abandoned for new intensive plantations with consequent endangering of biodiversity and genetic heritage.

In the last years, the Moroccan Government launched development programs such as the Programme Oasis Sud and the Plan Maroc Vert, with the goal to restore a sustainable oasis ecosystem. The main focus of these interventions is on date post-harvesting operations, improving storage, transformation and marketing capability of farmers and cooperatives, sustaining rural development trough market improvement, but most constraints of field operations are still unsolved.

This work reports an analysis that has been carried out on Moroccan oases farming system and outlines the main constraints proposing some possible mitigation interventions, based on the introduction of small mechanisation inputs along the production chain, especially for the most dangerous aerial operations such as pollination, harvesting and pruning. Interventions are designed to support and integrate the implementation of the governmental strategies as well as other interventions (e.g., of the international cooperation agencies), allowing to create a network of practice and to build partnerships.

Keywords: Date palm, light mechanisation, small scale, traditional farming systems

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