Background

Productive agricultural land resources in Egypt suffer pressures from multiple physical and human factors that lead to soil degradation and desertification. Irrigated lands are deteriorated, as the main source of irrigation water that comes from the Nile contains high concentrations of pollutants, as well as the re-used drainage water contains residues of fertilizers and pesticides. Sea level rise represents a threat to agricultural land especially in the Northern Delta, where saltwater intrusion from the sea into the groundwater, leads to decline of agricultural productivity. Moreover, rapid population growth leads to urban encroachment on fertile agricultural land. Therefore, urban growth is considered one of the important reasons of land degradation in Egypt.

The Egyptian authorities, in their efforts to enhance agricultural development, are faced with many constraints and determinants. These are: the implementation of land use policies that might be inappropriate; lack of realistic planning; lack of adequate scientific knowledge; not enough technical expertise capable of dealing with complex problems; many institutions are not capable to conduct integrated and multi-disciplinary studies and not enough follow-up actions on issues of land degradation and their impact on productivity and desertification; Lack of advanced educational and training programs that are designed for the sustainable management and conservation land resources; lack of effective communication at national, regional and international levels; lack of effective mechanisms for technology transfer and exchange of expertise and cooperation at various levels; and finally the absence of mechanisms to promote community participation in the decision-making process.

For the above-mentioned reasons, and for the development and modernization of institutional and individual capacities, the project aims to develop a new Master degree in the field of sustainable land resources management; organize training courses for faculty members to enhance knowledge-sharing; updating the technical skills and teaching methods on the issues of sustainable land management to solve developmental problems.

From the needs assessment survey that was carried out by the Egyptian partners, it was clear the importance to develop a new Master's degree based on innovative learning methods aiming at improving the quality of teaching and learning while ensuring high quality educational curricula. This approach is considered the most appropriate to meet the professional, employer and socio-economic needs of Egypt. Furthermore, as follow up of the survey, significant new initiatives were suggested to be implemented, such as cross-disciplinary courses, students and teachers' mobility, seminars, courses and traineeships organized by international Institutions working in SLM.