



New roles and Functions of research, extension and education in innovation system of medicinal plants

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The importance of medicinal and aromatic plants is increasing day by day. According to the Iran economy dependence on oil revenues, medicinal and aromatic plants can have a large impact both internal economy and in non-oil exports. The international market of herbal products is estimated to be US \$ 100 billion which is poised to grow to US \$ 5 trillion by the year 2050. For making full use of this potential, countries must develop scientific cultivation, post-harvest technology, processing, research and extension, patenting and marketing for medicinal plants. All of them are achievable if we can create an appropriate innovation system. Also it is necessary to change previous roles of the main actors in the innovation system, including research, extension and education. In regard to the above-mentioned, the main goal of this article was to determine of new roles of research, extension and education in Innovation System of medicinal plants. This study was conducted through library studies and electronic resources. At first the concept, importance and characteristics of agricultural innovation systems, were considered. Then three approaches including, Agricultural Innovation System, Transfer of Technology, and Agricultural Knowledge and Information System were compared with each other. Also the current functions of research, extension and education in the field of medicinal plants were discussed. Finally necessary new roles and functions of research, extension and education for the establishment and development of an appropriate innovation system for medicinal plants were proposed.

Key Words: Innovation System, Medicinal Plants, Research, Extension, Education