Study the feasibility of optimum utilization of date palm waste products

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Iran is one of the major date producers in the world. Based on FAO statistics (2005), Iran provides 17.44% of the whole fields under cultivation and 13.95% of the whole production amount in the world which stands in first place in area harvested and second place in producing amount after Egypt. Regarding the importance of restoration of waste-the part of agricultural products which can not be consumed directly- to industry and turn them into value added products, compiling this research program seemed necessary. Based on the researches the palm date waste products can be categorized in four groups: 1-date fruit (grade 3), 2-date kernel, 3-waste from palm pruning, 4-palm trunks. Which produce more than 500 thousand tons of waste and 8 million palm trunks, annually. These wastes can be changed to other products like date syrup, liquid sugar, alcohol, citric acid, animal feed, compost, neopan, so the amount of these waste products and producing high value added products were good motivation for the current research program. Therefore, first the literature of subject was described then the present situation was recognized. Based on these studies the amount of waste products, the existing factories, domestic and global knowledge and technology and production systems were specified. On next step, recognition of idealistic future was done. Finally, with SWOT analysis the strengths and weaknesses, challenges and opportunities were identified, based on them following strategies were defined for optimum usage of these waste products: variation strategy in producing citric acid (developing the industry is not recommended), liquid sugar (developing new industry is not recommended) and supporting the existing factories should be done), animal feed (developing the industry is not recommended but using palm kernel as a composition in existing factories can be done), neopan (developing new industry is not recommended and supporting the existing factories should be done) and aggressive strategy in producing compost (developing the industry is recommended).

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