Abstract

Today, agriculture section is one of the main worldwide energy consumers. Due to increasing rate of world population, it seems that agriculture needs to energy source more than past for providing the sustainable food security, that is the most important duty of this section. Noting to natural limited sources and consuming effect of some agricultural inputs on human and environment health, reveals the importance of research about energy use efficiency and energy use pattern on agriculture. The aim of this research is impact assessment of energy efficiency on irrigated wheat, rainfed wheat and rainfed barley agroecosystems of Kohgiluye County. Data acquisition was performed using field operation method and questionary completing. Questionary completing was performed by face to face interview in fields. Energy input amount of rainfed wheat, irrigated wheat and rainfed barley was obtained 02811.8, 01210.1 and 02282.12

MJ/Ha, respectively and energy output of mentioned fields was obtained 22822

22511.1 and 22212.2 MJ/Ha, respectively. energy efficiency for rainfed wheat, irrigated wheat and rainfed barley was calculated 0.12, 0.2 and 0.21, respectively. The most share of energy inputs to each of three agroecosystems were related to chemical fertilizers and fossil fuel.

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Study of energy use efficieney and eco no mical analysis in different produ ction systems of nimrouz

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