

西北山区农户马铃薯生产规模效率及其影响因素

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摘要 基于甘肃省定西市安定区农户实地调研数据,运用超越对数随机前沿模型,对西北山地地区农户马铃薯生产技术效率及其影响因素进行了实证研究。结果表明,山地地区农户马铃薯生产技术效率较低,增长空间大;中等规模农户技术效率平均值高于小规模 and 大规模农户;农户个体特征中专业化程度、农户认知水平和劳动力数量对马铃薯生产技术效率有正向作用;生产性服务变量中仅有施肥服务对马铃薯生产技术效率有显著的促进作用;土地特征变量中土地规模对马铃薯生产技术效率有负向关系。政府需鼓励农户生产向提质增效导向转变,探索农户马铃薯适度经营规模,以实现小农户和现代农业发展有机衔接。

关键词 山地地区; 规模差异; 技术效率; 影响因素; 马铃薯

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Scale efficiency and influence factors of potato household in the mountainous areas of Northwest China

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Abstract Based on the field research data of peasant household in Anding District of Dingxi City, Gansu Province, an empirical study on the technical efficiency and influence factors of potato production in the mountainous areas in Northwest China was conducted by using the translog stochastic frontier model. The results indicated that the overall level of technical efficiency of potato production in mountainous regions was lower, which implied a large space for improvement. Specifically, the average value of technical efficiency in medium-scale peasant household was higher than that in small-scale or large-scale farmers household. For the influence factors on potato production, it was revealed that in the characteristics of peasant household including the degree of specialization, cognitive level and labor forces had positive impacts on the technical efficiency of potato production. In the variables of producer services, only the fertilization positively affected the technical efficiency of potato production. In the variables of land features, a negative influence of the lands' scale on the technical efficiency of potato production was also found. Therefore, potato production transformation that improves the quality and efficiency in peasant household should be encouraged by the government. It is necessary to explore the moderate scale management of potato production to achieve the regular integration between peasant household and the modern agriculture development.

Keywords mountainous area; scale difference; technical efficiency; influence factor; potato

马铃薯是继玉米、水稻和小麦之后我国第四大粮食作物^[1]。近年来,我国马铃薯产业快速发展,联合国粮农组织(FAO)最新数据显示,2016年我国马

铃薯种植面积和产量分别占全球30.21%和26.30%。在地方社会经济发展过程中,马铃薯也发挥了重要作用。在我国一些贫困地区,马铃薯是困

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