

补贴政策属性的农户偏好及其边际替代^{*}

—以膜下滴灌技术为例

徐涛¹, 乔丹¹, 颜俨², 倪琪², 赵敏娟²

(1. 海南大学 管理学院, 海口 570228; 2. 西北农林科技大学 经济管理学院, 杨凌 712100)

提 要:以膜下滴灌技术为例,基于选择实验法构建不同政策情境,并通过模拟农户政策参与行为,以及MNL模型估计和边际替代率测算,量化分析农户政策属性偏好及其边际替代关系。结果表明:受访农户对不同政策属性的偏好从强到弱依次为耕地整理、技术指导、工时补贴和设备补贴形式;受访农户对参与补贴政策存在一定的抵触情绪,主要原因可能是技术使用效果不佳。据此建议:未来补贴政策实施应尝试与相关配套措施有机结合;进一步加大研发投入,提升拟推广技术的实际使用效果;政策制定与优化应更多地结合农户偏好,以最大限度获得农户支持。

关键词:补贴政策; 政策属性; 农户偏好; 边际替代率; 膜下滴灌技术

中图分类号: F325.15

文献标识码: A

* 收稿日期: 2019-1-2; 修回日期: 2019-4-30。

基金项目: 国家社科基金重大项目(15ZDA052); 国家自然科学基金项目(71473197; 71673223); 海南省哲学社会科学基金青年项目(HNSK(QN)19-23); 海南省自然科学基金青年基金项目(719QN198); 国家自然科学基金青年项目(71603209)资助。

作者简介: 徐涛(1988-),男,汉族,河南淮阳人,博士,主要从事资源环境管理、生态补偿等方面的研究。E-mail: xutao_2013@outlook.com

通讯作者: 赵敏娟(1971-),女,汉族,陕西兴平人,教授,主要从事农业经济管理等方面的研究。E-mail: minjuan.zhao@nwsuaf.edu.cn

(6): 58 – 64.

- [12] Hensher D A , Rose J M , Greene W H. Applied Choice Analysis: A Primer[M]. Cambridge: Cambridge University Press , 2005.
- [13] McFadden D. Conditional logit analysis of qualitative choice behavior[A]. Frontiers in Econometrics[M]. Pittsburgh: Academic Press , 1973: 105 – 142.
- [14] Duke J M , Borchers A M , Johnston R J , et al. Sustainable agricultural management contracts: using choice experiments to estimate the benefits of land preservation and conservation practices[J]. Ecological Economics , 2012 , 74(C) : 95 – 103.
- [15] Hensher D A , Greene W H. The mixed logit model: the state of practice[J]. Transportation , 2003 , 30(2) : 133 – 176.
- [16] 姚柳杨, 赵敏娟, 徐涛. 耕地保护政策的社会福利分析: 基于选择实验的非市场价值评估[J]. 农业经济问题, 2017 , 38(2) : 32 – 40 , 1.
- [17] 徐涛, 姚柳杨, 乔丹, 等. 节水灌溉技术社会生态效益评估 – 以石羊河下游民勤县为例[J]. 资源科学, 2016 , 38(10) : 1925 – 1934.
- [18] 贾蕊, 陆迁. 不同灌溉技术条件下信贷约束对农户生产效率的影响 – 以甘肃张掖为例[J]. 资源科学, 2017 , 39(4) : 756 – 765.
- [19] 刘军弟, 霍学喜, 黄玉祥, 等. 基于农户受偿意愿的节水灌溉补贴标准研究[J]. 农业技术经济, 2012(11) : 29 – 40.
- [20] 徐涛, 赵敏娟, 李二辉, 等. 技术认知、补贴政策对农户不同节水技术采用阶段的影响分析[J]. 资源科学, 2018 , 40(4) : 809 – 817.

Farmers' preferences of agricultural subsidy of policy attributes and their marginal rate of substitution – Taking drip irrigation as an example

XU Tao¹ , QIAO Dan¹ , YAN Yan² , NI Qi² , ZHAO Minjuan²

(1. School of Management , Hainan University , Haikou 570228 , China; 2. College of Economics and Management , Northwest A&F University , Yangling 712100 , China)

Abstract: Quantifying and analyzing the policy preferences of farmers' preferences and their marginal substitutions have important guiding significance for improving the accuracy and effectiveness of agricultural subsidy policies. Taking the drip irrigation technology as an example , different policy scenarios were constructed based on the Choice Experiments method , and the farmers' policy preferences were revealed by simulating the farmers' policy selection , and then farmers' preferences and the MRS between policy attributes were calculated by means of MNL model estimation and marginal rate of substitution analysis. The results show that farmers' preference for policy attributes from strong to weak is land consolidation measures , technical guidance , additional working subsidy and form of equipment subsidy. Farmers have certain resistance to participation in subsidy policies , which may be mainly related to the poor effect of technical use. Accordingly , the following suggestions are proposed: the implementation of future subsidy policies should try to combine with relevant supporting measures organically; it is necessary to further increase R&D investment , so as to enhance the actual use effect of the proposed technology; policy formulation and optimization should be more integrated with farmers' preferences to maximize farmers' support.

Key words: subsidy policy; policy attributes; farmers' preference; marginal rate of substitution; drip irrigation