

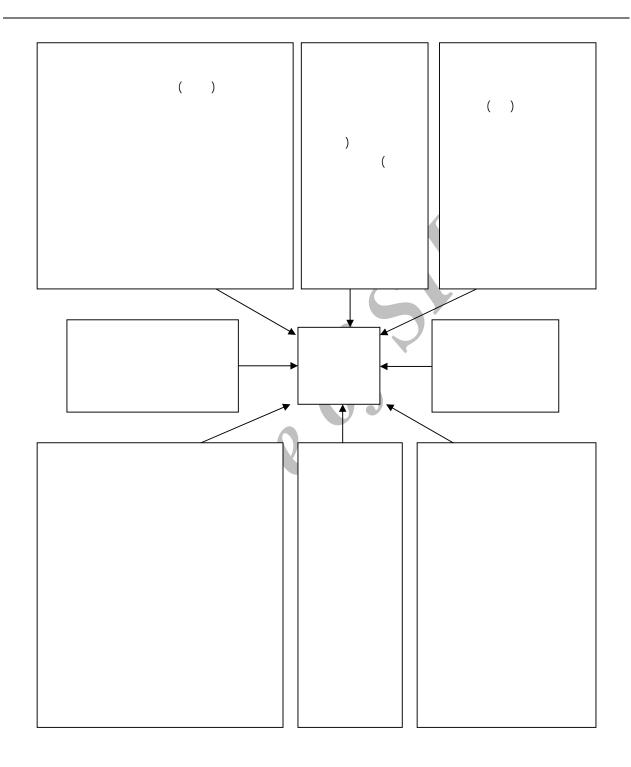
//: //:

 $(\textbf{E-mail:} \textbf{Mahboobi@gau.ac.ir}\ )$ 

( ( ). ( N= .( ) -Nowak -Napier

-Ervin

```
(
                               )
                                ()
(Xij)
                                      (X_i)
         (w)
                                        ) CI
   CI = \sum \frac{X_{ij}}{X_i} \times W_{ij}
                                                                                                        SPSS
        X_{ij}
                  w_{i\,\mathbf{j}}\ X_{\mathbf{i}}
                                                                                                    ).
                           .( r = / p = / )
```



...

$$(r = / p = / )$$
 ...  $(r = / p = / )$ 

$$(r = / p = / ).$$
  $(r = / p = / )$ 

p = /

```
(r = /
                                                                      .(r = /
                                                                               p = /
(
     ).
                           . ( r = /
                                                                                      . ( r
()
                                                 p = / ).
                                                                                .( r = /
                                                 p = / ).
                                                                                 .( r = /
           )
                                                 p = / ).
```

-Warriner & Moul

		1 ( m )	T	
		(r)		
1	**	1		
/	*	1		
/	**	1		
1	**	1	V	
- /	*	1		
/	**	1		( )
1	**	1		
1	**	1		
/	*	1		
1	**	1		
1	**	1		
1	**	1	V	
- /	**	1		
1	**	1		. 1
1	**	1		
1	**	1		
1	**	1		
/	*	1		. )
/	*	1		
/	*	1		
/	**	1		
/	*	/		
/	**	1		
1	**	1	v	
- /	**	1		

Beta

. (

•

Sigt	Beta	В	SigF	F	R	R			
1	1	/	1	1	1	/		X	
1	/	/	1	/	/	/		X	
1	/	/	1	1	/	/		X	
1	/	/	1	1	/	1		X	
1	/	/	1	1	/	1		X	
1	1	/	1	1	/	1		X	
1	/	/	1	1	/	/		X	
1	1	/	1	1	/	1		X	
1	/	/	/	/	/	/		X	
1	/	/	/	/	1	1	C	X	

) Beta

- 5. Chatakul, K, 1990. Factors Related to the Adoption of Technology for Soil and Water Conservation of Farmers in Villager Around Kao Hinsorn Agricultural Research and Development Centre, M.Sc. Dissertation, Behavioural Science Research Institute.
- 6. Clearfiled, F & Osgood, B. T, 1986. Sociological Aspects of the Adoption of Conservation Practices, Soil Conservation Science, Washington , D.C , USA.
- 7. Cramb, R, 1999. Smallholder Adoption of Soil Conservation Technologies Evidence From Upland Projects in the Philippines, University of Queensland.

- 8. Dialla, B, 1992. The Adoption of Soil Conservation Practices in Burkinafaso, the Role of Indigenous Knowledge ,ph.D thesies, Iowa state University.
- 9. Filson, G. C, Serman, N, 1999. Factors Affecting Farmers Adoption of Soil Conservation Practices in Southwestern Ontario, Canada.
- 10. Glor, D. E, 2001. Innovation Patterns, the Innovation Journal, Canada.
- 11. Semgalwe, Z, 1998. Household Adoption Behaviour and Agricultural Sustainability in the Northeastern Mountains of Tanzania: the Case of Soil Conservation in the North Pare and West Usambara Mountains, Dissertation, Wagenigen University, the Netherlands.
- 12. Warriner, G, Moul, G, M, 1989. Social Stracture and Choice of Cropping Technology: Influence of
- Personal Networks on the Decision to Adopt Conservation Tillage, University of Waterloo.

  13.Darmawan, G.N. 2000. The Change of Structural, Perception and Attitudinal Dimensions in Information Technology Implementation, Flinders University, School of Education.

  14.Erbaugh, J.M. *et al* .2001. A follow- up Survey of Farmer Pest Management Practices and IPM Knowledge Diffusion, Office of International Research and Development, Virginia, USA
- 15.Enters ,T & Hagmann 1996. National Forestry Research.
- 16. Fulponi, L. 2001. Agricultural Technology: Why Would Farmers Adopt? OECD, Paris, French 17.Filson,G.C & Serman, N.1999. Factors Affecting Farmers Adoption of Soil and Water Conservation Practices in Southwestern Ontario, Canada.

## Factors Affecting the Adoption Behaviour Regarding Soil Conservation Technologies in the Zarrin Gol, Watershed in Golestan Province

M. R. Mahboubi <sup>1</sup> H. Irvani<sup>2</sup> A. Rezvanfar<sup>3</sup> Kh. Kalantari<sup>4</sup> M. Mohseni Saravi<sup>5</sup>

## Abstract

This research is aimed at determining the factors that affect the adoption of soil conservation technologies among farmers executing soil conservation practices in Zarrin Gol watershed, Golestan province. The study is carried out through survey and proportionate stratified random sampling procedure. Two hundred and forty farmers executing soil conservation operations in six villages of mountainous districts of Zarrin Gol watershed were interviewed using questionnaires. The data resulted from this procedure was analyzed through SPSS software. The findings of the study indicate that there is a significant positive correlation (99%) between the factors of working time period of second – occupational farmers, relative advantage, compatibility, triability, observability of results, complexity of soil conservation operations, total land under management, total land under cultivation, quantity of soil conservation loans, amount of installments, preference for counseling the grey-bearded about preservative operations and the dependent variable of the adoption rate of soil conservations operations. Moreover, there was also a significant and positive correlation (95%) between knowledge of the effects of soil conservation operations, number of training courses the farmer has participated in, amount of information received from radio as well as instructional pamphlets, and the dependent variable of adoption rate of soil conservation procedures. The findings of regression analysis indicate that 60% changes in dependent variable is explainable by independent variable factors of: compatibility of soil conservation operations, total land under ownership condition of ownership lands, number of soil conservation loan, relations between soil conservation responsible organizations, access to loan, observability of results, amount of information received from radio and as well as farmer's wife's awareness of the existence of such conservation operations.

**Keywords**: Soil conservation, Adoption behavior, Relative advantage, Compatibility, Soil Conservation technologies.

<sup>&</sup>lt;sup>1</sup>-Ph.D. Scholar of Education and Extension of Agriculture, Faculty of Agriculture, University of Tehran (E-mail: maboobi@gua.ac.ir)

<sup>&</sup>lt;sup>2</sup>-Associate Professor., Faculty of Agriculture, University of Tehran

<sup>&</sup>lt;sup>3</sup>-Assistant Professor., Faculty of Agriculture, University of Tehran

<sup>&</sup>lt;sup>4</sup> - Assistant Professor, Faculty of Agriculture, University of Tehran

<sup>&</sup>lt;sup>5</sup>-Associate Professor., Faculty of Natural Resources, University of Tehran