

## **The pattern of regression analysis on factors social communications in Tehran state desertification (emphasis of Central Desert)**

**<sup>1</sup>Mahdi Parsafar and <sup>2</sup>Mohammad Sadegh Sabouri\***

<sup>1</sup>Management of Agricultural Extension and Education, Agriculture Department. Islamic Azad University, Garmsar Branch, Garmsar, Iran

<sup>2</sup>Young Researchers & elite Club, Garmsar Branch, Islamic Azad University, Garmsar, Iran

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### **ABSTRACT**

*This research was present the pattern of regression on factors social – communications in Tehran state desertification (emphasis of center Desert). The type of function aim, the method because– communication (regression) the research was dependent– variable desertification measure activities, independent– variable included: promotional activities, communication– information channels, rate of social– acceptability in the desertification, people's participation, and government support. These researches were statistical society about 628 farmers and gardeners have participation in desertification activities. After introductory study on/into 30 person's farmers the sample was determine the variance society N=232 person's. The research was suitable for selected samples a set sampling stratified method. The questionnaire was gathering tools data the validity by a group of teachers, reporters, experts, university Islamic Azad Garmmsar University, agricultural experts, it's reliability with factor the obtained by ratio Kurnbokh Alpa 0/93. In part variables, desertification degree of social acceptability showed the result of desertification, attitude into desertification experts services provided, promotional activities into are determined more than variance use it desertification variable.*

**Keywords:** Factors social communication, desertification, Tehran state and Central Desert.

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### **INTRODUCTION**

Desertification is the main problem lands in the dry – areas have been declining of the world. The lost of soil and vegetation has take adverse. Almost making up 50 present of lands by incorrect management of agricultural that decline by human is. A large part of many countries in dry – areas with desertification. Although too grazing and forest logging are cause increases in the desertification. Agricultural activities increase into erosion water and wind, the most factor the water supply have agricultural product because incorrect resource management into lands salinity cause increase the water resources. In addition destruction of vegetation, erosion and lands salinity, in fertile soils May effects desertification should be noted by compact soil and scaling. Mining urban practice, tourism can take adverse into different parts lands leaving, because the lands are in group of agricultural lands vain fed and irrigation. If fund resource and academic policies have been corrected fight with desertification can be useful with existing techniques [2].

The desertification active practices under development that serious influence on the rural life. This condition have various reasons, including: recognition of culture natural resources than correct lack of exploit of facilities in the dry – areas and semi– arid, with increasing population growth every day, implementation issues various plans was created [14].

Desertification is one of the most important crisis in the world today is, so that already about 1300 million people living in more than 110 countries (nearly three – fifths of the world), the effect of harmful suffer it that consequences economic, social, political uncountable the effect inhabitants in other areas of earth.

In other words, desertification a global problem that influence directly 250 million persons, 1.3 or more 4 milliard hectare the ground [6].

Due to exist Iran 88/6% the space in the territory dry – areas, is fragile ecosystem; also it's specific 34.8% county space (about 5 equal world average) have occupied. Under the law FAO until 20 past years, every year 7 percent added to desert areas, so desertification in Tehran that 20% population country in their place the very important. On the other hand, as a result of desertification map caused by this index at surface of plain Varamin on all of working unites indicated in the environment (GIS) that Varamin types of index the numerical values 1/16 it at low desert class, so 94% of Varamin area impress the index at low and insignificant desert class 6% other can be medium class. Therefore domain the researcher at desert and desertification, aim of cognition the mechanisms with protection and reconstruction stable at reserves resource the water and soil can be desert ecosystem at priority research institute be forest and pastures. On the other hand, more 1.2 milliard effect onto inhabitant people at 110 countries. Annual the damage caused 42 milliard dollar [7], uncountable the effect of deleterious will be sooner and later other inhabitants. It's enough to know the distance of only 6 years, it's mean that 1993 until 1999 about 470 million persons added to number of poor's, because their received to 5/1 milliard persons in the threshold of the third millennium BC [12]. Human's due to any deprivation security they have lost possibility of having healthy life. In other words, speed into desertification is reduced quality of life. In this chapter emphasis importance of texts mention that present research aimed to determine the pattern of factors social – communication was effective the measure desertification is perform in Varamin city. The research related desertification important factors were discussed economic, technical, climate, lack of knowledge the villagers.

1. In a titled article “Combating desertification” (Negev) B. A Partno, U, N, Safyrel, Agriculture irrigation against urbanization irrigation (2004). The concluded farmers and livestock the main element of desertification. Urban development that reduce the increased risk of desertification. If planning shouldn't be done the subject reduce in the future. Agriculture development cause minimizing the desert.

2. in an article titled “Simulation the dynamic model of desertification in Egypt” (2010). The concluded using the data live then sensitivity of the changes related to desertification the dynamic nature in desert environment. The important stimulate factors can be expansion of urban more and life style people.

Wind erosion is main factor of erosion in arid and semiarid region and observed unfavorable landscape of it, are [15]. The results of studies showed that damage caused by wind erosion is severe in dry years [5]. Wind erosion is including detachment of soil particles, Tran's port and deposit of soil by wind [16]. The most important factors affecting on wind erosion in region is wind factor Based on these finding the following recommendation can stated by [16] the lack of management is the major factor for the lack of sustainable development, so new policies and practices in the field of sustainable development should be adopted. Developing of national policies for grazing and forest protection. Encourage of people to work for the protection of the natural environment Governments should adopt national studies protect forests such as this study.

## MATERIALS AND METHODS

The present type of research the method because communication (regression) because factors on desertification notes Tehran state. The research dependent – variable will be reviewed in order to determine role of independent – variable. Desertification measure activities, independent – variable included: promotional activities, communication – information channels be rate of rural subcultures. The researches were statistical society about 628 farmers and gardeners have participation in desertification activities.

In order to research determine the sample size, after introductory study on/into 30 person farmer background, the sample was determine the various society Cochran formal based on the number of sample formed determine N=238 persons. He research was suitable for selected samples use it sampling stratified method. The questionnaire was gathering tools data the initial reforms reviewed revising by anchors, planning partner, consulting by group of teachers, reporters, experts, university Islamic Azad Garmsar University, agricultural experts, after the reforms go to stage preliminary evaluation. The questionnaire motioned 93% were obtained Alph ratio Kurnbakh. The gathering dates were analyzed in two parts descriptive – analytical statistics (using statistics software SPSS19).

**RESULTS AND DISCUSSION**

The finding in correlation table between rate of participation variables, desertification degree of social – acceptability, government supports, and attitude into desertification and extension services provided the level 99%. The precedent variable in desertification activities, variable rate desertification activities, there is a related meaningful the level 95%. This related for variables; age, education, marriage, not observed with other variable research.

**Table 1: frequency distribution of respondent's age, education, marriage**

Age	30 to 40	41 to 50	51 to 60	61 years		
Abundance	23	86	98	31		
Education	Analphaloetic	Reading and writing	Guidance	Diploma	Diploma	Bachelor or higher
Abundance	13	34	74	61	45	11
Background activities exploitation	1 to 5	6 to 10	11 to 15	16 years		
Abundance	20	83	104	31		
Marriage	Single	Married				
abundance	9	229				

**Table 2: Examine the related correlation between independent variable with rate of desertification**

First Variable	r	P
Age	-0.57	0.329
Marriage	-0.83	0.183
Educations	0.105	0.62
Precedent desertification activities	0.133	0.42
Rate of participation	0.811**	0.000
Desertification degree of social – acceptability	0.833**	0.000
Government supports	0.811**	0.0000
Attitude into desertification	0.811**	0.000
Rate of extension services provided	0.821**	0.000
** Meaningful level 1%		Meaningful level 5%

The levels determine in order to role of each extension variables desertification measure activities, was direct significant independent variable the regression equation to complete entry (Enter) describe result of under table.

**Table 3: Measure role of independent – variable in measure desertification activities**

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	S.E
Enter	0.930	0.865	0.862	0.2242

Based on above table, calculated ratio determination, the research variables to the analysis, 86%

R<sup>2</sup> = 0/865 the related changes have rate of desertification, 13/5% factors the research not describe by variable.

**Table 4: Contribution rate each of research independent – variable on measure desertification activities**

Independent-variable	B	Beta	T	Sig
Origin of width	-0.71	-	-2.743	-0.458
Rate of participation	0.198	0.205	5.517	0.000
Desertification degree of social-acceptability	0.209	0.236	0.802	0.000
Rate of government support	0.191	0.195	4.601	0.000
Attitude into desertification	0.177	0.207	4.963	0.000
Rate of extension services provided	0.188	0.195	4.427	0.000

The part variable, desertification degree of social – acceptability, rate of participation, attitude into desertification, rate of extension services provided into be determined more than Varamin use it desertification variable.

Due to find model of multiple regression can with under equation estimated rate of effective factors of desertification. Attitude into desertification (0.207) + rate of participation (0.202) + desertification degree of social – acceptability (0.236) = Y rate of government supports (0.195) + rate of extension services provided (0.195).

- Especially the result of increase method use it extension – communication tools important tools obtaining desertification to development activities. The research by research confirmed [5], [10], [11].

It could desertification degree of social – acceptability of development activities have important role in desertification. Result of research the subjective supports it [8]

- Positive attitude into desertification relation positive strong have agriculture development, it's mean that important position the control desertification as an phenomenon of agriculture anti-development. The mention result the research by [7].

-Rate of interference of people in designing, performed planning desertification, role of important positive in advance planning responsible that can reach to favorable result confirmed because the results is support cases [1], [16],[5], [4]and [10].

Based on result of research, rate of support economic, policy, structures government an important element in development desertification activities, correctly performing explain it. Mention this is a study by [4].

### CONCLUSION

The generalize research explain it human factors, public awareness their desertification interfered, based on government supports the important of role have decrease desertification. Therefore it's suggested:

- Method of increase public information important of role have decrease desertification. Therefore it's suggested, information decrease, through development extension activities, specially facilitate – realistic method will follow the permit more actively participation to agricultures.

- Suitable source communications, especially sources valid, like: staff- agriculture Jihad, natural sources, agriculture bank through it be reliable much agriculture, could necessary information though their transfer area a desertification activities.

- Experts, agricultures with kiosk construction could notice range of deserts for hours specifies in the week, each region as a development – approach as experts activities be completed or it's a suggested.

- Respondent attitude into desertification to considered; beneficiaries could understand the importance desert. So, knowledge development level with agricultures skills in the cases. Especially be allocated planning level sound and vision.

- Participation, agriculture interfering in technology field, one of importance social – culture variables in desertification. So recommended all administrator use it all planning, performance in desertification with participation agriculture.

### REFERENCES

- [1] Abooeh, F, Factors Affecting Participation of Ranchers in Protection and Revitalization of Rangelands in the Province of Semnan. Master Thesis, Islamic Azad University, *Science and Research Branch*, **2002**, pp, 65.
- [2]Ahmadi H, 2002, Criteria and indicators for desertification Series of lectures on the International Day against Desertification Tehran. Forest, *Rangeland and Watershed Country*, **2002**, pp, 215.
- [3]- Anderson, J .R, Agricultural Advisory Services. Background paper for World Bank Development Report **2008**.Agriculture for Development.Washington,DC:The World Bank.
- [4]- Anderson, J. R. & Feder, G. , *Agricultural extension: good intensions and hard realities*. The World Bank research observer, 19, 1, 42-60. retrieved 18, December, **2005**  
from<http://wbro.oxfordjournals.org/cgi/reprint/19/1/41>
- [5]Asiabaka, C.C., and Promoting Sustainable Extension Approaches: Farmer Field School (FFS) and its role in sustainable agricultural development in African.Lessons from Kenya Paper presented at the *Association of Third World Scientists*, Njoro, **2003**, pp, 142.
- [6] BUECHEL, B, From Learning to Management. <http://archive-ouverte.unige.ch/unige:5858>, **2000**, pp, 65.
- [7] Farahi M, Shahryary A, Fakhoreh S, Pahlavanrvy A, Identification of wind affected regions in Zabol district (*Sistan va Baluchestan province*, southeast of Iran,**2008**,pp,16.
- [8] Farahi M, Shahryary A, Fakhoreh S, Pahlavanrvy A, Wind erosion rate estimation in Tasuki-Rigchah region using IRIFR Model (*Southeastern Sistan*),**2007**, pp, 45.
- [9] Hassan F G, Elhag A M, Dafalla M S, Vegetation dynamic assessment in three land use types system White Nile state, *Sudan university*.**2007**,pp,25.
- [10]Karbasioun, M., Mulder, M. & Biemans, H, *Journal of International Agricultural and Extension Education*. **2007**, 14, 2, 31-44.
- [11]Manyong, V. M &Alene ,Arega. D, [www.springer.org](http://www.springer.org). 4 July. **2006**, 4, 7, 42-50.
- [12]Motevali H, Factors affecting participation in rural desertification. Unpublished dissertation, Islamic Azad University, *science and research branch*, **1999**, pp78.

- [13]UNEP .1997 :World Atlas of Desertification .New York & London .John Wiley & Sons, Inc. and Arnold )second edition), **1997**, p 132.
- [14] World bank, Enhancing Agricultural Innovation: How to Go Beyond the Strengthen of Research Systems. *World Bank. Washington DC.***2007**,pp,97.
- [15] Shariati, M.R., S. Ziadbakhsh and N. Varamini, *Quarterly Journal of Forest and Range*, **2004**, pp, 67.
- [16]Tripathi, B, D. Agricultural Extension Personnel in New Millennium -A Prospective View. Available on [www.manage.gov.in/ managelib/faculty/BDT\(2\)](http://www.manage.gov.in/managelib/faculty/BDT(2)), **2003**, pp, 158.