

[Research]

## Improving Rural Regions Environment by Establishing and Maintaining Parks and Role of Extension Education Factors (Case Study: Isfahan province-Iran)

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### ABSTRACT

Nowadays the growth of deserts is one the most important problems in Iran. This phenomenon has many reasons such as growth of population, global changes in the climates and many undesirable consequences such as the erosion of agricultural soils and immigration of rural people to urban regions mainly to the capital of Iran, Tehran. Isfahan province is one of the semi-arid and desert regions in the center of Iran. It is the first province in Iran that has made rural parks in its arid and semi-arid rural regions. As the successful experiences of developing and developed countries shows, the main instrument to achieve people's successful participation in rural development is efforts for planning and operating extension education projects. The purpose of this paper is to examine and study the role of extension education factors in persuading rural people to participate for establishing and maintaining rural parks in order to decrease desert generation, improve ecosystems and reduce immigration from rural regions in Isfahan province. The type of the research is mixed - qualitative and quantitative-methods. The findings of the research, reveals meaningful relationships between educational and demographic characteristics of extension education employees responsible in rural parks of Isfahan, and achievements in their works. There are also meaningful relationships among age, number of children, quantity of education, quality and distance of rural parks from villages and quantity and quality of using the villagers in establishing and maintaining rural parks. As a whole, the findings of the research prove that to take into account the extension education factors has a major role in establishing and maintaining rural parks and is essential in increasing the efficiency of the similar rural development projects in Iran.

**Keywords:** *Extension, Park, Rural, Development, Environment, Iran.*

### INTRODUCTION

Development is a multi-disciplinary work with inter-connected aspects such as economical, financial, human, political, empowerment and self-sufficiency, informational, communicational ones. Two important aspects of development ignored in many development endeavors, especially in developing countries, are environment and recreation. Desert and semi-arid regions area of Iran are confronting with several problems such as desertification, erosion, growth of unfavorable climate, unemployment and poverty in rural regions and immigration of people to urban regions, especially to

the capital. This vicious circle in Iran has started specifically after the beginning of 1970s with incomplete land-reform policies in rural regions of Iran. In recent years in spite of many endeavors for rural development in Iran, rate of immigration has increased instead of being decreased. Many scientists and development experts in Iran believe that the main reason for this phenomenon is considering rural development without being connected to one another. This outlook led to overlapping the activities the waste of resources and time. (Lahsaeizdeh, 2000; Karami and Fanaie, 1994). A participatory project called "rural parks" was

established for improving rural ecosystems in desert and semi - arid regions of several provinces in Iran during the years 1993 and 1994. It was a collaborative work between Ministry of Jihad Sazandegi and extension of education organizations. The aims of this project were to help the rural people to establish and maintain rural parks. Isfahan province is the first location wherein the rural parks project was introduced. The number of rural parks in Iran has recently increased to 700 (Ministry of Jihad Agriculture, MOJA, 2005).

This paper, studies the different aspects of this rural development project especially regarding facilities and the efficiency of extension education organization in rural parks for improving rural ecosystems and people welfare. For this reason it is necessary to introduce concepts of rural parks and extension and education in rural development.

#### **Theoretical & conceptual basis of rural park**

-To define the meaning of park, various scientists stated different definitions, some of which are, as follows:

- Area of open land used as a place of recreation.
- A natural opening of grassland or a park-like area in a forested region.
- Land set apart to be used for public recreation.
- Country park: area in the countryside set aside for the public to visit and enjoy (Herren & Donahue, 1991).
- An area of public land, specially an area in or near a city, usually laid out with walks, drivers, playgrounds, etc., for public recreation.
- An open square in a city, with benches, trees, etc.
- A large area known for its natural scenery and preserved for public recreation by a state or national government (Stephens, A. 1992; Webster Unabridged Dictionary, 1995). Yellow Stone was the first national park in the world established in U.S.A in 1872, for the purpose of conserving natural resources. Consequently, national parks in the world propagated. The first planted forestry park in Iran was established in "Khargoosh Darreh"- near Tehran in 1965, MOJA, 1995)

Various studies in different countries show the importance of establishing "Parks" in rural regions and huge benefits of them such as:

- Changing and improving landscape with agricultural intensification in rural watershed (Medley, *et al.* 1996).
- Protecting and Valuing Rural cultural landscape and preserving natural resources by establishing rural parks (Melnick, 1983).
- Increasing rural welfare and income by establishing and developing various "Parks" such as national, urban, rural parks, conserved and protected regions,...that were the cause of increasing tourists,...that were the cause of increasing tourists. Many studies have been done in different countries all of them showing the importance of developing rural parks for human welfare (Adamowicz *et al.* 1996).

#### **Concept of extension of education in rural development**

The use of the word "extension" derives from an educational development in England during the second half of the nineteenth century. Around 1850 A.D., discussions began in Oxford and Cambridge- two great universities in England- about how they could comply the educational needs of people and diffusion of innovations and modern technologies from universities to communities and bring it near to their homes, in the rapidly growing populations in industrial and urban areas. (Blackburn, 2001; Lahsaiezadeh, 2000; Karami and Fanaie, 1994).

The overt use of the extension is concept and notion of "extending" relevant and useful information to the adult population in the society. Its objective is "imparting useful information to all classes of the community, particularly to those unable to avail from experienced teachers, or may prefer learning by them.

Ray V. Herren, stated the philosophy of CES- Cooperative Extension Services- in the U.S.A. as below: "to help people identify their own problems and opportunities, and then to provide practical research-oriented information that will help them to solve their problems and take advantage of the opportunities". CES is responsible for programs in four major areas namely:

agricultural and natural resources, home economics, community development, and 4-H youth development (Herren and Donahue, 1991)

"The process of extension education is one of working with people, not for them, of helping people become self-reliant, not dependent on others, of making people the central actors in the drama, not stage hands or spectators, in short, helping people by means of education to put useful knowledge to work for them (Blackburn, 2001).

In defining extension five common elements have been stated

- 1- Extension is a type of intervention.
- 2- Extension makes use of communication as an instrument to achieve changes.
- 3- Extension can be effective only through voluntary changes.
- 4- Extension focuses on some goal-oriented processes and outputs that differentiate it from other communicative interventions.
- 5- Extension is executed through an organization (Karami and Fanaie. 1994).

Extension education organization has a major role in rural development endeavors in all countries of the world especially in developing countries, where the majority of rural people are poor, illiterate and in lack of access to sufficient educational facilities (Shahbazi. 2002).

#### **Methodology of the research**

The research was carried out in Isfahan in 2005-2006. The population includes all extension employees responsible for rural parks in MOJA (70 persons), elitists villagers most of them being members in rural councils (300 persons).

The type of the research is descriptive-analytical-applicable. It includes 15 hypotheses about extension employees who are responsible for parks. The independent variables of these hypotheses are: years of education and experience, official occupation of respondents, years of experience in monitoring rural parks, educational field, living environment from childhood to youth (rural, city or urban), being native or not, and situation of employment.

Dependent variables of these hypotheses are: effect of factors and indicators of extension education in establishing and maintaining rural parks.

Research also contains 13 hypotheses about rural people's utilization of the parks. Independent variables of these hypotheses are: age, number of children, degree of education, amount of time participating in establishing and maintaining rural parks, state of marriage, job and capabilities of villagers in establishing and maintaining rural parks. In order to collect data, the researcher used two separate types of questionnaires for extension employees and villagers. Type of sampling for extension employees was census and for elite villagers was categorical systematic sampling method. Type of rating viewpoints of respondents in questionnaires is likert scale type and complementary open-ended questions. Questionnaires items were filled in the researcher attended in rural regions and cities. To validate the questionnaires, they were given to the experts of rural development in Tehran and Tarbiat Modarres Universities, for the reliability, a pilot study was done in three cities in arid regions of Isfahan that is Kashan, Natanz and Ardestan, and some of their selected rural regions. Cronbach's alpha test method and coefficient of Cronbach's alpha for the questionnaires achieved over 85%. Widely scattered cities and rural regions in vast Isfahan province and negative opinions of some of the extension employees scientific research works, were among some of the difficulties of the research. Generalizing the results of the research to other provinces in Iran seems to be difficult, because of the different economic, social, climatic, and cultural conditions. The results of this research can extend in similar projects for the rural development context in Iran.

#### **RESULTS**

After mining of data, estimating central tendency indicators (such as mean, mode and frequency) and scattering indicators, with respect to the Tables (1, 2 and 3), the results show:

- Most of the extension employees responsible for rural parks in MOJA are young and not sufficiently educated in the required field, or educated in other fields.
- They are not at home in rural regions, because they were grown up in city and urban regions.

- They have above 12 years work experience as a whole, and over four years work experience in establishing and maintaining rural parks.
- Almost all of the rural elites and local leaders were men, and women lack any formal responsibility in the regions.
- In comparison to people in urban regions, the level of illiteracy between villagers is very high, which makes a major barrier for development endeavors.
- 80% of villagers either do not use parks or their use is occasional.
- Over 75% of the villagers' main jobs were not agricultural related ones; this fact shows the unfavorable and desert climates in Isfahan province.
- 50% of the villagers preferred to plant home-grown and non-native plants in their parks.
- All of the elite villagers believed that the parks were very necessary for them, and if more facilities and possibilities were available, they could solve more problems and overcome the difficulties of rural regions.
- 80% of villagers believed that they were able to plant and maintain plants (trees and flowers) in rural parks.
- About fifty percent of villagers believed that extension workers responsible for rural parks in MOJA did not ask for their opinion about parks, its location and type of the plants, and did not make use of their skills, knowledge and capabilities in project.
- About eighty percent of villagers believed their participation in making and maintaining the project were insufficient.
- About fifteen percent of villagers believed in low efficacy of parks, for the reasons such as: ruined conditions of parks, hostile locations of parks, lack of toys and facilities, low extent of parks, being distant from rural regions, and so on.
- About eighty percent of villagers noted that the extension employees responsible for rural parks in MOJA did not train them the way of establishing and maintaining parks.
- Extension employees responsible for rural parks in MOJA believed that selecting appropriate species of trees and flowers compatible to the desert climate of Isfahan, are very important in the fulfillment of the project.
- Employing local leaders and identifying the best way of participation method and strengthening it by extension education, were realized as very important factors in making the project more successful.
- There are meaningful relationships among age, number of children, rate of education and amount of employing villagers in the project, and also among rate of work experience, type of official responsibility, and field of education in extension employees responsible for rural parks in MOJA and ranking of extension education factors and parameters by them.

**Table 1.** Viewpoints of elite villagers in efficacy of rural parks in filling leisure times of children and youth, as an impediment to immigration and increasing attractions of rural regions

(L=Low, M=Medium, H=High, F=Frequency, P=Percent)

Indicator of variables	amount	F	P
Viewpoints of villagers in efficacy of rural parks in filling leisure times of children and youth	L	23	51
	M	11	24
	H	11	24
Parks as an impediment to immigration	L	8	18
	M	9	20
	H	28	62
Parks as a tool for increasing attractions of rural regions	L	6	13
	M	6	13
	H	33	74

**Table 2.** methods of utilization rural parks by villagers

Indicator of variables	F	P
Utilization in individual form	16	36
Utilization in family form	14	31
Utilization in group form	10	22
Utilization in occasional and rarely form	5	11

**Table 3.** Ranking Role of indicators and factors of extension education in establishing and maintaining rural parks by extension employees  
(VL=Very Low, L=Low, M=Medium, H=High, VH= Very High, M=Mean)

Title of the factor	VL	L	M	H	VH	M
Utilization of local leaders in establishing and maintaining rural parks	–	–	2	14	15	4.42
Strengthening culture of participation by means of extension education endeavors	–	–	3	15	15	4.32
Identifying and implying best method for local participation by means of extension research	–	–	2	17	12	4.32
Preparing field for rural youth participation in establishing and maintaining rural parks	–	–	1	20	10	4.19
Implementing regular and appropriate educational programs for executers of rural parks	–	–	4	17	10	4.19
Implementing visits and field trips for rural people from other parks	–	1	6	10	14	4.19
Regular linkage among research-extension-education centers in context of parks	1	1	2	14	13	4.19
Determining prioritized educational needs of rural peoples and presenting and solving them before Implementing project of parks	–	2	4	13	12	4.13
Utilization of extension experts in Implementing projects	–	–	5	18	8	4.1
Implementing regular educational programs for villagers in context of establishing and maintaining parks	–	–	5	18	8	4.1
Utilization of mass media for encouraging people in park project	–	1	6	13	11	4.1
Implementing extension education programs for the other fields in purpose of increasing their economical power for participation in projects	–	2	6	11	12	4.07
Educating rural youth in field of tree and flower planting and designing of parks	1	–	5	16	9	4
Implementing extension programs in appropriate times and locations	–	–	9	12	10	4
Regular and exact evaluation of parks by extension agents	–	3	6	13	9	3.97
Identifying other experts in field of rural development by extension programs and projects in the region and considering their viewpoints	–	–	13	9	9	3.87
Continuing follow-up evaluation of the project by extension agents in establishing and maintaining parks	–	4	5	16	6	3.77
Considering cultural differences in establishing and maintaining parks	1	2	5	18	5	3.77
Facilitating and helping of extension work in this project by other organizations	–	4	7	16	4	3.65

### Conclusion

To improve achievements and success in the field of rural development in future, it is necessary to make the most of extension education school, as a foundation, for educating rural people in order to help them to recognize their needs, mobilize them to work, and finally direct them to better life conditions and well-beings.

With respect to the findings of the study (qualitative and quantitative aspects), we ought to consider the following issues for

the improvement and success of this environmental project in rural regions of Iran and possibly other countries which have similar cultural, social, economic conditions.

-Most of the extension employees responsible for rural parks, didn't have an academic or relevant degree in their work, and were aged below forty. This means that if MOJA organize formal, informal, and in-service educations for them in the required fields of rural development. They

will do the job with more interest and greater efficacy in future.

- In almost all of the visited rural regions, women didn't have any formal responsibility in the society they rarely made any use of rural parks because of social- cultural reasons or else. Extension workers responsible for rural parks must recognize these barriers and make effective attempts for removing and modifying these unfavorable conditions.

- high level of illiteracy and low-literacy among people of visited rural regions. Because of this phenomenon the people don't recognize their different needs (such as needs for recreation, hygiene, and etc.). By applying appropriate methods for literacy, education such as concretization method, liberty education method of Paulo Ferrier from Brazil it will be possible to literate the people and increase the levels of their lives and well beings.

-Forty percents of rural people visited parks accidentally, the main reason of which was lack of possibilities such as toy and recreation tools especially for children and un-attractiveness of parks because of planting specific types of trees' species and unfavorable growth of them in parks.

-For increasing attractiveness and relief of people in rural parks, one must recognize and consider various species of plants in country and globe that have similar environmental conditions, and then select best of them to create the highest attractiveness in collection of parks.

-in time of establishing rural parks, the best places must be selected so that the people might have an easy access to that this can be a major source of attraction in rural parks.

-With establishing appropriate fields and contexts, especially by extension education programs, one can do many duties, works and responsibilities in establishing and maintaining rural parks for local people.

-For establishing and maintaining rural parks, there is the possibility to get budget from different governmental organizations, NGOs, charitable people, and encourage people and other institutions for establishing memorial of great men/women such as scientists, poets and poetesses.

- Before establishing rural parks, must coordinate extent, facilities and capabilities of them with elite villagers and some of the rural population and recognize and consider their needs and interests in designing and making rural parks.

- By the side of and within rural parks, if library and sporting capabilities are established, efficiency of them will be highly increased, especially for rural young people.

- Establishing rural parks if accompanied with more studies and extent in different places of rural regions can play a more important role in limiting growth of desert in arid regions.

-In preparing maps and frameworks of rural parks, it is needed to consider available traditional and cultural environment in rural regions and ancient Iranian park maps i.e. "Paradises" (such as Chehar Bagh in Isfahan and Baghe Fin in Kashan, centre of Iran).

-If possible, rural parks must be a source of income for local people who can maintain and protect them by means of planting fruit-bearing plants, preparing location for selling of magazines, newspapers, etc.

## REFERENCES

- Adamowicz, Wl; Boxall, PC; Luckert, Mk; Phillips- WE; White- WA., 1996. Forestry, economics and the environment - Walingford ; UK . CAB INTERNATIONAL, Oxford University Press, New York. 275 pp.
- Blackburn, D. (Eds)., 2001. Foundations and Transfer of Activities in Agricultural Extension. Translated to Persian by S. J. F. Hoseini. Scientific Publications
- Center of Islamic Azad University. Tehran. Iran.
- Herrern R.V . and R. L. Donahue.,1991. The Agricultural Dictionary . Columbia, U.S.A., Delmar Publishers Inc.
- Karami, E. and Fanaie , A., 1994. Study the Theoretical Frameworks in Extension, vol 1 & 2. (Persian) Ministry of jihad sazandegi . Tehran. Iran.
- Lahsaeizdeh, A., 2000. Rural Development Sociology (In Persian). Zar publications, Shiraz. Iran.

- Medley, K., Okey Brian W., Barret Gray W., Lucas Michael . F. and W. H. Renwick., 1996. Landscape Change With agricultural intensification in a rural watershed, Southwestern, Ohio, U.S.A , *Journal of Landscape Ecology* . 10 (3), 161-167.
- Melnick, R., 1983. Protecting Rural Cultural Landscapes: Finding Value in the Countryside. *Landscape Journal*. Vol.2 No 2 , 85-97.
- Ministry of Jihad(MOJ)., 1995. Rural Parks Project . (Persian). Tehran. Iran.
- Ministry of Jihad Agriculture (MOJA), 2005. Department of Extension and production systems ( in Persian).
- Shahbazi, S., 2002. Rural Development and Extension. (Persian). 3th edition. Tehran University Publications. Tehran. Iran.
- Stephens, A.,1992. Dictionary of Agriculture. New Delhi , India. Universal Book Still .
- Webster, M., 1995. Webster 's New Collegiate Dictionary. U.S.A. G&C. Merriam Company.

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