Factors Influencing Non Government Organizations' Participation in Environmental Conservation

Hedjazi, Y.^{1*}, and Arabi, F.

¹Department of Agricultural Extension and Education, University of Tehran, Karaj, Iran

Received 10 March 2008; Revised 15 Aug. 2008; Accepted 25 Aug. 2008 ABSTRACT: Prevalence and diversity of non government organizations (NGOs) is indicative of social and political maturity in any given society. Nowadays, an important concern of NGOs is their efforts in how to attract people's participation in conserving the environment. To promote the participation of these organizations in the environmental conservation, need arises as to determine the factors influencing their participation. Considering this in mind, this study conducted. Using data collected from 100 members of the board of directors of 20 NGOs (active in environmental conservation) from Tehran province of Iran, this study analyzed NGOs participation. Results showed that, there should be a relationship between a numbers of factors, such as, age, precedence in environmental activities and level of education and Participation. Regarding gender, there was no significant difference in participation between the respondents. The regression analysis also revealed that the level of education, experience in environmental activities, information-related variables, as well as social related variables were best predictors of their participation. According to these results some recommendation suggested to accelerate NGOs participation in conserving environment.

Key words: Participation, Non Government Organizations (NGOs), Environmental Conservation

INTRODUCTION

Environmental protection has come to be recognized as a principal area of focus for international environmental politics and policymaking (Gan, 1998). To reduce the environmentally created issues, many governments have legally emphasized on its' conservation. For example, the constitution of Thailand recognizes the rights of people to participate in the protection of natural resources and environment. Similar provisions have been made in other countries, such as, Philippines, New Zealand, and Azerbaijan (EPA 1999). Iran's environmental crisis is one of the severest in the world. At the same time, environmental initiatives there at both the government and private levels are unique not only among Muslim countries, but in the developing world in general. Iran's constitution (Article 5, for instance) contains the strongest environmental statement of any contemporary national charter (Foltz, 2000). Also, special importance given to it

*Corresponding author E-mail:yhejazi@ut.ac.ir

through the Fifth Economic, Social and Cultural Plan, in which, environment has been dealt with as an independent issue, are indicative of the prevalence of a strong, decisive national will of public participation in the important affair of protection of environment. Public participation is a kind of dynamic activity that enables and encourages people to better play their function in developmental undertakings. In this type of participation, any individual benefits from the right of participating in decision making related to his way of life. Cohen and Uphoff (1997) believe that participation is a means of developing aims, ideologies, and a behavior resembling equity and democracy. They believe in that people must have the opportunity of participation in all developmental processes, whatever they may be, planning, implementation and or evaluation. It is the people themselves who decide about the direction, change in, and trend of developmental programs and projects. In fact, it is the government that

participates in people's planning, not people whom are participating in planning by governments. In another concept, Midgeley (1986) and Ghai (1988) believe that presently all developmental undertakings such as research, planning, management, implementation and evaluation have become of a participatory nature.

A suitable mainstream of public participation in the context of environment and natural resources is the initiation and formation of non governmental organizations (NGOs), the promotion and collaboration of which must seriously be put into consideration. These organizations, in spite of extended precedence, have not yet their necessary standing in either environment or natural resources. The arising question is to find out the factors influencing individuals' participation in environmental activities. Which factors are effective in promoting participation? What a share goes to each factor in participation? Which of these factors is more closely related to participation, as regards NGOs' activities?

Most of the world's population lives and works in the informal sector. A key role of Civil Society Organizations, such as NGOs, is to develop community capacity to link with formal sector institutions (Mac Abbey, 2008). Over the past 30 years, NGOs have become more salient in programmatic efforts to promote rural development in the impoverished societies of the global South (Raberg and Rudel, 2007). Review of literature also showed that there is widespread consensus that directly involving non-state associations in environmental management and policy and focusing environmental management activities at the regional scale represents an improved approach to governance (Brick 2001; Cortner and Moote 1999; Gibson 2000; Friedmann 1998; Wondolleck and Yaffee 2000). As Samuel and Thanikachalam (2003) argued, NGOs have played and continue to play an important role in organizing mass movements by creating awareness about the negative impact of the projects on the environment, and the people's responsibility.

Turnock (2004), discussed that Environmental NGOs are playing an important role in

environmental education in South-eastern Europe and their efforts are often welcomed by governments. But, as Carter and Turnock (2002) argued, despite their useful work in debating ecological issues, working on environmental projects and increasing public awareness, it has to be said that ENGOs still have few rights over consultation and can easily be ignored. Knowledge creation and dissemination is a crucial dimension of these activities (Hendriks, 2002). According to Jaix (1992), NGOs have a more accurate and practical knowledge of local environmental problems than would be possible for government organizations to attain. Despite the increase in the scale of NGO efforts, their contributions to development have, with some exceptions, not been well documented or analyzed (Bebbington, 2004).Lernar (1964) has emphasized as important the relationship between participation, and level of studies, socioeconomic standings, age and news and publications' being easily at one's disposal.

Mushi (1986) states four factors of "establishment of a spirit of self dependence among people", "provision of sufficient information with regard to public participation" as well as" having the technical and financial resources at one's disposal" as important in this context. Goulding (1990) found that, factors of information, education, organization, as well as mutual understanding between individuals and organizations as effective factors in public participation, particularly in environmental activities.Brandon and Wells (1992) demonstrated the link between participation and the political and socioeconomic factors. Ryan et al. (2002), have named the steps in decision making, being informed of people's needs and co-working with them in the administration of affairs, as well as a mixing together of public and specialists' views as effective in public participation in environmental affairs.

Connor (1997) realizes following factors as effective in the participation of individuals in a society: participation techniques, access to means of communication and information sources, feedback, the societal structure, as well as history and culture of a society. Keough (1998) introduced eight stages in achieving participatory development. Among them are: sincere communication with people, an understanding of the indigenous knowledge, concern for individuals' freedom, offering varied educational courses to promote learning.

Brich (2001) has conducted the study of three important factors affecting environmental conservation as related to nongovernmental organizations. He has listed the followings as important and effective: the relation between governmental and public organizations, peculiarities of a society (precedence, an individual's experience in problem solving, and interaction between local organizations and institutions), and socioeconomic interests of users and of other beneficiaries of participation.

Akabayashi (2003) concluded that individual characteristics, such as: sex, maturity, idea development, one's familiarity with participation, being alert of the prevailing problems, information concerning the precedent pertinent activities (by governments and individuals) are some of the important factors of participation. Vari (2004) views the financial support, allocation of budget to participation planning, incentives, type of function and activities of social institution, as well as individuals' characteristics as important and effective factors in participation. Shobeiri (2007) found significant differences between Indian and Iranian students in their level of environmental awareness. The purpose of this study is to understand factors affecting participation of NGOs' members in environmental conservation. The specific objectives are to analyze relationships between participation in environmental activities and factors such as individual, cultural, informational, managerial, social, economical, and Motivational characteristics.

MATERIALS & METHODS

NGOs defined as private organizations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services or undertake community development (World Bank, 2002). During the 1990s, environmental NGOs proliferated in Iran, and have generally worked well with the Islamic government (Foltz, 2000). The first ENGO was set up by a group of Eshkezar villagers of Yazd. They started their activity from the early of 1970s. Their aim was to combat desertification through stabilization of sand dunes. At present about 370 NGOs are active in Iran, 20 of which operate in Tehran. They carry out their activities in the contexts of culture building, educational, research, extension educational and service giving .Their main purpose is to attract public participation in the conservation and resurrection of natural resources.

Descriptive survey design for data collection was adopted in the present study. The studied population was comprised of 100 members from the board of directors of those NGOs in the vicinity of Tehran province of Iran which were involved in environmental activities. A number of five questionnaires were sent to each NGO to be filled by members as follows: two by director and vice director of the board of management, one by the secretary of the committee, and two by Two members of general assembly of a longer record of service.Cronbach's alpha computed in the pretest to measure the reliability of the questionnaire indicated that it was 0.80. It meant that index had high reliability.

To evaluate the extent of participation in environmental activities, the following items were taken into account: prevention of 1) Water pollution, 2) Air pollution, 3) Soil pollution, 4) Sound pollution, 5) Pollution resulting from garbage and waste material, and finally 6) Reforestation and rehabilitation of green spaces. Many factors can influence on NGOs' participation. From those, seven factors, including individual characteristics, cultural, informational, managerial, social, economical, and motivational factors were analyzed.

RESULTS & DISCUSSION

Results showed that 58% and 42% of the respondent were man and woman, respectively. Also, 51% of them belonged to the age group ranging from 20-30 years old, followed by 39% and 10% to the age ranges in 31- 40 and 41- 50 years, respectively. As regards of education levels, 23% held post high school degrees or lower; 47% were college graduates and 30% held post graduate degrees or higher ones. In the case of

Archive of SID

experience, 34% of them had 1- 5 years of record of service in NGOs with the average of 4.7 years. Forty five percent of the respondents were educated in environmental sciences or related fields. The other respondents were educated in other fields, such as English or French language, business management, political and social sciences. The result of T-test revealed that there was no significant difference between male and female in regard with participation (t= 0.772). Thus, gender was not a determinant factor in NGOs' participation.The results of correlation analysis in (Table 1) depicts that, there were significant relationships between participation and some

Table 1. Correlation between individual characteristics and participation

Factor	variables	Correlation Coefficient
Individual characteristi	Age	0.303**
CS	Experience in environmental activities	0.276**
	Level of education	0.251^{*}
	gender	0.002
* p<0.05	** p<0.01	

variables, consist of age, record in environmental activities and education levels.

Factor	Independent variables	coefficient	
	Acquaintance with processes and methods of participation;	0.232^{*}	
	Being informed of public Participation capacities (Previous efforts of		
Informational	individuals and government regarding participation);	0.272**	
	Being informed of environmental Problems;	0.265**	
	Access to mass media.	0.122**	
Cultural	Morale of self reliance;	0.015	
	Believe in participation;	0.007	
	Establishment of democratic spirit;	0.010	
	Mutual understanding between beneficiaries and those in charge.	0.005	
Managerial	Organizing the beneficiaries into local and vocational groups (mutual		
	under- standings between people and the organization);	0.114	
	Prioritization of needs and environmental problems;	0.471**	
	Authorization of people in decision making;	0.251**	
	Assimilation of beneficiaries' visions with those of specialist		
	(interrelation between governmental institutes and people).	0.019**	
	Provision of opportunities for social activities;	0.253**	
Social	Mutual relationships between beneficiaries and those in charge;	0.222**	
Social	Benefit from social standing;	0.098	
	Possession of sprit of cooperation and participation.	0.065**	
	Financial support and provision of budget for participation projects;	0.061	
Economical	Access to means, profitable projects and credit sources;	0.118	
	Payment of some of the expenses to the beneficiaries.	0.023	
Motivation	Sharing benefits with beneficiaries and their participation in		
	implementation of projects to promote interest;	0.075	
	Taking into consideration the problems of interest to beneficiaries (clarity		
	of aims);	0.022	
	Activities being in match with beneficiaries' capabilities.	0.112	
	* p<0.05		

Table 2. Correlation between participation and selected factors

Factors	R	\mathbf{R}^2	В	Beta	Sig
X1	0.622	0.386	2.194	0.317	0.002**
X_2	0.654	0.427	1.452	0.232	0.003**
X ₃	0.655	0.429	0.105	0.437	0.000^{**}
X_4	0.673	0.452	0.206	0.352	0.000^{**}
X_5	0.686	0.470	0.562	0.232	0.009**
X ₆ F=16.085	0.699 constant= 60.31	0.488	0.278	0.184	0.017^{*}

Table 3. Results of regression analysis related to participation in environmental activities

 $Y = 60.31 + 2.194x_1 + 1.452x_2 + 0.105x_3 + 0.206x_4 + 0.562x_5 + 0.278x_6$

 $X_1 = Age$

 X_2 = Level of education

 X_3^{-} = Provision of opportunities for social actives

X₄ = Mutual relationship between beneficiaries and those in charge

X₅= Acquaintance with processes and methods of participation

X₆₌ Being informed of public participation capacities

Spearman correlation coefficient was employed to evaluate the relationship between the extent of participation in environmental activities and variables of 6 selected factors, including informational, cultural, managerial, social, economical, and motivational traits. As it can be derived from (Table 2). there were significant relationships between the level of participation and informational and social factors as well as mutual discussions among participants. In order to determine the variables that best predicted participation in environmental activities, a multipleregression analysis with stepwise method was carried out. The regression model incorporated all of the independent variables which had significantly correlations with the participation. The dependent variable was the respondents' participation in environmental conservation. As (Table 3). shows, 6 variables (out of 22 selected variables), namely, levels of the education, record of services in environmental activities, provision of opportunities for social activities, mutual relationship between beneficiaries and those in charge, awareness of participatory processes and methods as well as knowledge of public participation capacities were found to have a positive effect on the respondents' participation in environmental activities. The R² value of 0.488 with F value of 16.085 indicates the power of model for prediction its significance at .05 level of probability and reveals that 48.8 percent of variance in participation could be explained by 6 aforementioned variables.

CONCLUSION

The aim of the above research work was to study factors influencing the participation of NGOs in the conservation of environment.Results indicate that there was no significant difference between two groups of males and females as regards the degrees of participation in environmental activities. These result confirmed by Agrawal (2006). According to these results, gender was not a determinant factor in participation. There was significant relationship between the degrees of participation and age. This result also confirmed by several studies, such as, Akabayashi (2003); Wynn et al. (2001) and Wilson (1996). A middle age of population would thus be a positive factor in participation. There existed a significant relationship between the record of services in environmental activities and the degree of participation. Therefore, as Wilson (1996) and Brotherton (1989), stressed on motivation, a greater participation of these people could be achieved through a provision of incentives.

The relationship between education and participation was another finding which was consistent with Mendoza (2006) and Blum (1991). Social factors, as results indicated, played an important role in the extent of participation. This result is in agreement with Keough (1998), and Brandon and Wiles (1992). They believe that social activities, formation of societies, and mutual relationships between people and the governing body are among the important factors in attracting participation. Environmental projects that are in accordance with capabilities of beneficiaries along with ceding responsibilities to beneficiaries are among important factors in achieving the aim of participation.

Also, provision of opportunities for discussion among beneficiaries regarding environmental problems, and formation of public institutions in these regard are among programs to promote participation.Considering the importance and significance of news media in attracting the participation of NGOs in environment conservation, level of knowledge of NGOs' members in this context could be promoted through presentation of courses and seminars; setting up of pertinent fairs and gatherings to highlight the hazards of pollutions initiated from garbage disposal, soil, water, air ad sound.

Reforestation as well as establishment and rehabilitation of green areas must be paid special attention. Mushi (1986) and Goulding (1990) have emphasized on the information dissemination and knowledge of public information needs as important factors in attracting public participation. Keough (1998) believes that, public knowledge in a special field must become know prior to implementation of any participatory project. He emphasizes the indigenous knowledge as important in attracting public participation. The other result obtained from the study has been the positive and significant correlation between role of participation in environmental activities and managerial factors such as prioritization of needs, ceding authority of decision making to beneficiaries.

These managerial factors can be very effective in attracting participation through decentralized administration of these NGOs. Goulding (1990), and Cohen and Uphoff (1977), concluded that such determinants as organizational factors, individual's agreements, with the help of people management of affairs, and an assimilation of public vision with the vision of specialists play important roles in attracting people participation.As mentioned earlier, level of education, services record in environmental activities, along with social, managerial, and informational factors are effective in NGO's participation in environmental activities.

Therefore, these points are necessary to be put into consideration if the policy of going towards NGO type of management is to be followed in Iran.As Table 2 depicts, there was not any significant relationships between participation and two selected factors, namely, economical and motivational factors. These results are inconsistent with Dikito – Wachtmeister (2001), Chen et al. (2005), and Akpabio and Aboh, (2007), which were related to gender, for economical, and Clearfield and Osgood (2003) for motivational factors. It is necessary to consider these issues in future studies of NGOs in Iran.

REFERENCES

Akpabio, I. A., and Aboh, C. C., (2007). Factors affecting women NGOs success with local women in Akwaibom State, Nigeria. The J. Int. Soc. Res., **1(1)**, 20-30.

Agrawal, A., Yadama. G., Andrade, R., and Bhattacharya, A., (2006). Decentralization and Environmental Conservation: Gender Effects from Participation in Joint Forest Management. CAPRi Working Paper 53. Available online at: www.capri.cgiar.org

Akabayashi, A., (2003). Report of the Project Strategies for Social Consensus Building on the Policies Concerning Advanced Medical Technologies. Tokyo: Fuji Research Institute Corporation.

Bebbington, A., (2004). NGOs and uneven development: Geographies of development intervention. Progress in Human Geography, **28(6)**, 725–745.

Blum, A., (1991). What Can Be Learned From A Comparison of the Agricultural Knowledge Systems? The Case of The Netherlands and Israel. Agric-Ecosystem and Environment: **4 (4)**, 325-339.

Brandon and Wells, (1992). Environment: ETAP Reference Guide Book. Politically infeasible and ethically unjustifiable", Latin America. 347.

Brich, D., (2001). Strong Local Leadership – Quality Public Services, TSO. England House, London.

Carter, F.W. and Turnock, D., (2002). Environmental Problems in East Central Europe (Eds.). London: Routledge.

Clearfield, F., and Osgood, B. T., (2003). Soil Conservation Services, The Case of No- Till Cropping. Rural Sociology, **68(2)**, 278-304.

Cohen, J. M., and Uphoff, N., (1997). Rural Development Participation: Concepts Measures for Project Design Implementation and Evaluation Inthado, New York, Cornell University.

Connor, M., (1997). Public Participation: A Manual, Victoria, B. C. Development Press, Canada.

Cortner, H. J. and Moote, M. A., (1999). The Politics of Ecosystem Management, Island Press, Washington DC.

Dikito – Wachtmeister, M. S., (2001). Social Capital. The World Bank PREM Notes: Gender. August. The World Bank, Washington D.C.

EPA (1999). Environmental Protection Agency. Available at: http://www.capside.org.sg/ and <u>http://</u> iisd1.iisd.ca/50comm/commdb/list/co8.htm

Foltz, R. C., (2000). Environmental initiatives in contemporary Iran. University of Florida Working Paper No. 13-1. Available at SSRN: <u>http://ssrn.com/</u>abstract=241768 or DOI: <u>10.2139/ssrn.241768</u>

Friedmann, J., (1998). The New Political Economy of Planning: the Rise of Civil Society. In: M. Douglass and J. Friedmann (Eds.), Cities for Citizens, Wiley, London.

Gan, L., (1998). Energy Development and Environmental NGOs: The Asian Perspective. CICERO. Working Paper No. 3. ISSN: 0804-452X.

Ghai, D., (1988). Participation in Development: Some Perspectives From Grassroots. Genova United Nations Research Institute for Social Development (UNRISD).

Gibson, C. C., McKean, M. A. and Ostrom, E. (2000). Explaining Deforestation: The role of local institutions' in C. C. Gibson, M. A. McKean & E Ostrom (Eds.) People and Forests: Communities, Institutions, and Governance, The MIT Press, London.

Goulding, M., (1990). Negotiating the Demobilization of the Contras with Comandante Franklyn, Nicaragua.

Hendriks, C., (2002). Institutions of Deliberative Democratic Processes and Interest Groups: Roles, Tensions and Incentives. Australian Journal of Public Administration **61(1)**, 64-75.

Jaix, R. B., (1992). Role of Residents, Non Governmental Organizations and Quasi – Public Agencies in local Government in India", in: Comparative Studies of Public Administration: the Role of Residents NGOs and Quasi-Public Agencies, 88-113. Tokyo: Eropa Local Government Centre. Cited in Riley, John M. 2002. 'Stakeholders in Rural Development – Critical Collaboration in State- NGO Relationships'. Sage Publications, New Delhi.

Keough, N., (1998). Participation Development Principle and Practice. J. Commun. Develop., **33(3)**, 87-196.

Lena, M., Raberg, T. and Rudel, K., (2007). Where are the sustainable forestry projects?: A geography of NGO interventions in Ecuador. Applied Geography, **27**, 131–149.

Lernar, D., (1964). The Passing of Traditional Society. Free press; New York.

Mac Abbey, E., (2008). Constructive regulation of nongovernment organizations. The Quarterly Review of Economics and Finance, **48**, 370–376.

Midgeley, J., Halla, A., Hardiman, H. and Narine, D., (1986). Community Participation, Social Development and the State. London, Methuen.

Mendoza, C. C., (2006). Factors influencing participation in Environmental Stewardship Programs: a case study of the Agricultural and forestry Sectors in Louisiana. PhD Thesis, Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College. The School of Renewable Natural Resources.

Morrison, T. H. and Lane M. B. (2004). The Rise and Rise of Environmental NGOs: Unforeseen risks to democratic environmental governance. In: Australia. Refereed paper presented to the Australasian Political Studies Association Conference University of Adelaide 29 September - 1 October.

Mushi, S., (1986). Institutionalization of Popular Participation, The Tanzanian Experience Unesco, Paris.

Reeni, S., and Thanikachalam, V., (2003). Non-Governmental Organizations (Ngos) Spearheading Public Participation In Environmental Issues: In Martin J. Bunch, V. Madha Suresh and T. Vasantha Kumaran (Eds.), Proceedings of the Third International Conference on Environment and Health, Chennai, India 15-17 December.

Ryan, E., Lawson, B. and Hutchison, R., (2002). Reaching in a guide to Creating Effective Public Participation for State Historic Preservation Programs. Heritage, Preservation, Services. Available online at: http://www.nps.gov/history/hps/pad/PlanCompan/PublicPartic/RORIsec1.html

Shobeiri, S. M., Omidvar, B. and Prahallada, N. N., (2007). A Comperative Study of Environmental Awareness among Secondary School Students in Iran and India. Int. J. Environ. Res., **1(1)**, 28-34.

Turnock, D., (2004). The Role of NGOs in Environmental Education in South-eastern Europe. Int. Res. in Geographical and Environ. Edu., **13(1)**, 103-109.

Vari, A., (2004). Hungarian experiences with public participation in water management. Water international **29(3)**, 329-337

Wilson G.A., (1996). Farmer environmental attitudes and ESA participation. Geoforum, **27(2)**, 115-13

Wondolleck, J. M. and Yaffee, S. L. (2000). Making Collaboration Work: Lessons from Innovation in Natural Resource Management, Island Press, Washington DC.

Wynn, G., Crabtree, B. and Potts J., (2001). Modelling farmer entry into the environmentally sensitive area schemes in Scotland. Journal of Agricultural Economics, **52** (1), 65-82.