To Determine Stakeholder's Roles in Community Based Management for Sustainable Rural Development in Iran

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Abstract: Community based management as incorporates both a top-down and bottom-up approach that involvement beneficiary sections such as local community, government states and non governmental organizations. It has also been applied to designate approaches where local communities play a central but not exclusive role in rural sustainable development process management.This study was survey method and is descriptive- correlation research, which was carried out to determine stakeholder's roles in community based management for sustainable rural development in Iran. Study population were consisted 270 of local community (Rural Councilors), offices experts in rural related office activities such as Jihad Agriculture office, Natural Resources office, Environment office and government office and, Agricultural and Natural Resources Organization members. Kruskal Wallis test were used to extract agreement perspectives and SPSS,LISREL software were used to analyzed. Based on the confirmatory factor analysis, we can conclude that: "Community Role" ($R2=0.73$, $Sc = 0.85$) is superior to the two other sectors considered (GO,Role and NGO,Role) in predicting the "Stakeholders" role in CBM. In effect, this scale is best adjusted to the data and has the strongest predictive power. Also the result of confirmatory factor analysis showed that "Providing local information" and " Identify and survey problems" as the importance roles of local community, "Facilitate the activities by the local community and non-governmental sector" and "Monitoring on development process" as the importance roles of GO sector. "Technical analysis community issues" and "Consultation with the people to analyze problems" as the importance roles of NGO sector were identified.

Key words: Community Based Management · Sustainable Rural Development · Confirmatory Factor Analysis · Local Community, Government Sector · Non Governmental Sector

INTRODUCTION

Co-management is often implemented by a government in response to a crisis of the resource. Many times, co-management is initiated as a solution for managing resources that had been open-access and are thus suffering degradation [1].

In other cases, co-management has been suggested and implemented as an alternative when state regulation has failed to protect the resource in question [2, 3] or when financial and technical difficulties render state control impractical. Though co-management should not be thought of as a panacea, it does present the opportunity to address the shortcomings of management that is entirely community-based or state-driven [4].

Closely related to "co-management as network" is the concept of community-based management [1]. Community-based approaches can form part of the co-management process and when community-based management is a large component of a co-management process, the result can be thought of as "community-centered co-management" [5]. Such an approach would be toward the maximum end of Tyler's [6] community power continuum that called community control.

Community Based Management (CBM) is basically the involvement of the beneficiary communities in the management of sustainable rural development facilities. It is an approach that has been in use since the early 1980s, The focus in CBM is to pay attention to consumer demand for services, build community capacity to manage resources and facilities and consider long term

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institutional arrangements for technical assistance to communities.

There is no consensus among scholars or practitioners on which mix of community and governmental control produces the best results. The optimal point may well depend on the objectives set for the co-management process [7]. Because the players are diverse and the relations among them are multiplex, Carlsson and Berkes [7] suggest that conceptualizing co-management systems as networks best reflects the complex realities of these systems of governance.

Danida [8] and Sarrafi [9], called this approach as "Good governance" system as a development strategy at local level. Therefore, the establishment and maintenance of good governance or "appropriate decision-making arrangements" is the only feasible way to prevent the failure (or ensure the success) of rural sustainable development. Especially with decentralization, local communities are expected to assume greater responsibility for community development.

This research relies on a broad definition of community- based management as incorporates both a top-down and bottom-up approach. This collaborative process is based on the participation of all individuals and groups that have a stake in the management framework. Social, cultural and economic objectives are an integral part of the management framework. Government retains responsibility for overall policy and coordination, while the local community plays a large role in management. Also community- based management creates the opportunity to take advantage of scientific, technical knowledge and related NGOs and local or traditional knowledge [10]. This definition leaves sufficient flexibility for the definition of the system but highlights interest in the interactions between state and non-state actors. emphasizes on multi-pectoral collaboration in order to minimize fragmentation of efforts, waste of resources and competition for participatory actions [11]. This is specifically an attempt to find new solutions for the failure of top-down approaches to resource conservation and sustainability. CBM has been seen as a conservation, empowering, poverty reducing and/or general rural development strategy [12]. Such community-based approaches create opportunities to strengthen social capital and community relations and to develop effective institutions for the management of sustainable rural development [12]. Sometimes, it has also been applied to designate approaches where local communities play a central but not exclusive role in natural resource management [13]. Community based management is the key to build capacity, motivate and encourage community members, both men and women, for equal participation in the development process. Local people are capable to implement and manage rural sustainable development with guidance and capacity building.

Here are the major activities required to involve communities in the community based management process:

The first step in community-based or co-management approaches is to identify key stakeholders and potential participants. Stakeholders are more accessible and have framework for a common vision for community based management. Community organizations will become the pivotal instruments responsible for managing community development, which include the assessment of community needs/demands as well as the potential-such as the resources available internally and externally-planning and implementing development programs [14]; maintaining information systems [15, 16]; providing goods and services [5]; developing and maintaining rural infrastructure; increase communities organizing and level of participation [17]; managing conflicts; and monitoring and evaluating community development [14]. The non governmental organization can assist the community in identifying an appropriately trained community organizer; developing partnerships and sharing responsibilities; facility technical information and promotion.

The public or governmental can assist and provide goods and financial services; interacting effectively with local governments; developing partnerships and sharing responsibilities and raise public state awareness through the community based management planning and implementation process [15, 16, 18].

This research present an innovative framework to produce and implement local programs with public and NGO,s participation to sustainable rural management and development. The main structure of this framework is based on local community (rural council) in order to bring about sustainability.

The main goal was to determine stakeholder's roles in community based management for sustainable rural development in Iran that identified: What stakeholders can be formed the structure and framework of a community-based management? Who of them has an important role? And what is their role and responsibilities?

MATERIALS AND METHODS

The methodology used in this study involved a combination of descriptive and quantitative research and included the use of correlation, regression and descriptive analysis as data processing methods. The statistical population consisted of local community (rural council members), senior experts in related fields

from departments of agriculture and natural resources, environment and state officials and members of agricultural and natural resources engineering organization as NGO, who were involved in activities related to community- based management. Sample size included 120 rural council members, 60 senior experts from ministry of agriculture and 90 agriculture and natural resources engineering organization members. In this study attitudes towards community- based management approach were measured by set of questions about: "role of community in community-based management", "role of public sector in management based on community", role of non-governmental sector in the community-based management. The content validity of questionnaire were measured by a group of extension, rural and agricultural development specialists. A pilot test was conducted to determine the questionnaire's reliability and the Cronbach's alpha was 0.78.

Analysis of Data: All data were analyzed by using SPSS (the Statistical Package for the Social Sciences) and LESREL (LInear Structural RELationships). Appropriate statistical procedures were used for description and inference.

RESULTS AND DISCUSSION

The results of this study showed that 44.5% of respondents were member of local communities, 22.2% were employed in public sector and 33.3% were NGOs

members. The average age of local community members were 41 years with average of 6 years of membership in rural council. The average age of public sector employees was 36 years old, with average of more than 10 years of experiences.The average age of non governmental organization members was 33 years old with average experience of 6.5 years.

Agreement Test: Nonparametric test (Kruskal-Wallis) in analyzing data and means comparison between three groups; indicated: rural council members, senior experts and members of agricultural and natural resources engineering organization were in agreement with 21 characteristics out of 26 CBM,s stakeholder role's characteristics that were extracted from Delphi survey methodology and studied in other countries. The remaining 5 characteristics are of significant differences according to respondents attitudes. Table 1 shoes ranking of agreement characteristics based on coefficient variation (CV) (Table1). This result have been approved by Borrini-Feyerabend *et al.* [2000] and Faryadi [2005].

Confirmatory Factor Analysis: Based on the confirmatory factor analysis, we can conclude that: "Community Role" ($R2=0.73$, $Sc^1= 0.85$) is superior to the two other sectors considered (GO,Role and NGO,Role) in predicting the "Stakeholders" role in CBM. That's indicated "Community Role" had the highest impact factor loadings of 0.85. It appears to be the best indicators of "Stakeholders". In effect, this scale is best adjusted to the

Table 1: Ranking of agreement characteristics based on coefficient variation

Roles of Local Community	CV	Priority
Organizing local people	0.265	1
Providing tools and work force	0.275	2
Prioritized needs of the local community	0.276	3
Providing local information	0.287	4
Identify and survey problems	0.291	5
Encourage and reinforce participation of local people	0.299	6
Participation in decision making	0.300	7
Roles of Public Sector	CV	Priority
Approving Laws and policies	0.220	1
Monitoring on development process	0.240	2
Community's information analysis and solution offer	0.243	3
Providing training and advice	0.248	4
Verifying and approve projects	0.255	5
Providing financial assistance for projects	0.256	6
Facilitate the activities by the local community and non-governmental sector	0.258	7
Planning and project implementation	0.364	8
Roles of NON-Governmental Sector	CV	Priority
Presenting research results to the local community	0.259	1
Technical analyzing of community issues	0.265	2
Providing educational assistance	0.274	3
Facilitate the process of sustainable development activities	0.282	4
Consultation with the people analyzing problems	0.286	5
Providing the field to community Contacts	0.290	6

[1]Completely Standardized Solution

Table 2: Estimation of regression weight, t- value and R^2 of X- model variables

Observed X	SC^1	T	R^2
Community role	0.85	R.V.[2]	0.73
Government role	0.71	9.40	0.50
Non- government role	0.67	9.20	0.45

1. Completely Standardized Solution, 2. Reference Variable

Table 3: Estimation of regression weight, t- value and R^2 of community's role variables

Roles of Local Community	SC	T	R^2
Providing local information	0.84	15.75	0.71
Participation in decision making	0.76	14.30	0.58
Providing tools and work force	0.74	13.70	0.54
Identify and survey problems	0.84	16.67	0.71
Prioritized needs of the local community	0.72	13.30	0.52
Encourage and reinforce participation of local people	0.81	15.72	0.65
Organizing local people	0.56	10.13	0.34

Table 4: Estimation of regression weight, t- value and R^2 of Governmental role variables

Roles of Governmental Sector	SC	T	R^2
Approving Laws and policies	0.45	7.06	0.20
Monitoring on development process	0.76	13.20	0.57
Community's information analysis and solution offer	0.58	9.36	0.33
Providing training and advice	0.51	8.06	0.26
Verify and approve projects	0.57	6.28	0.33
Providing financial assistance for projects	0.63	10.40	0.39
Facilitate the activities by the local community and non-governmental sector	0.71	12.10	0.50

Table 5: Estimation of regression weight,t-value and R^2 of Non Governmental's role variables

Roles of NON-Governmental Sector	SC	T	R^2
Presenting research results to the local community	0.47	7.07	0.22
Technical analyzing of community issues	0.68	10.82	0.46
Providing educational assistance	0.40	5.99	0.16
Facilitate the process of sustainable development activities	0.51	7.84	0.22
Consultation with the people analyzing problems	0.66	1045	0.43
Providing the field to community Contacts	0.65	10.28	0.42

data and has the strongest predictive power. Table 2 shoes estimation of regression weight(or completely standardized solution), t- value and R^2 of stakeholder roles in CBM. Based on the R^2 coefficients "Community Role" explains about 72 percent of variance in "Stakeholders". This result have been approved by Olyel [19] and Welch-Devine [1].

Confirmatory factor analysis were used to determine and endorsement the importance of all agreement stakeholders roles. Result indicated:

Roles of Local Community: The result indicated that "Providing local information" and "Identify and survey problems" have largest factor loadings (Completely Standardized Solution) of 0.84; It appear to be the best indicators of local community role in CBM. The inter correlations which have already been described in Table 3, showing that the other indicators had a large factor loading and were important.

Roles of Governmental Sector: The result indicated that "Monitoring on development process" has a largest factor loading (of 0.71; It appear to be the best indicators of governmental sector role in CBM. The inter correlations which have already been described in Table 4.

Roles of NON-Governmental Sector: The result indicated that "Technical analyzing community issues" has a largest factor loading of 0.68; It appear to be the best indicators of non governmental sector role in CBM. The inter correlations which have already been described in Table 5.

CONCLUSION AND RECOMMENDATIONS

Based on finding of this study, the following conclusion was drawn and recommendations are given:

Based on the confirmatory factor analysis of community roles, we can conclude that: 1- "Community Roles" is superior to the two other sectors considered (GO, Role and NGO, Role) in predicting the "Stakeholders" role in CBM. In effect, this scale has the strongest predictive power. "Providing local information" and "Identify and survey problems" to be the best indicators of local community roles in CBM. "Monitoring on development process" to be the best indicators of governmental sector roles in CBM. Based on the confirmatory factor analysis of NON-Governmental roles, we can conclude that "Technical Analyzing of community issues" to be the best indicators of non government al Sector roles in CBM.

This result emphasizes the significant role of local community and it is also proposed that it cooperate with GO and NGO for communication and technical decision making.

Upshot, this research provides an initial exploration of new management practices such a community-based management approach that involves many stakeholders and should be adopted for success and sustainability in rural strategy development. The most representative indicator for stakeholder's role in community - based management is local community role. So, it is important to considered rural people and community in rural development managing process. This result have been approved by Clarsson and Berkes [7], Plummer and Armitage [18], Borrini-Feyerabend, *et al.* [15], Faryadi [16], Meshack *et al.* [20], Danida [8], Olyel, [19] and Welch-Devine [1].

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