

Full length Research Paper

# Investigation of demands of various stakeholders and participatory management in Zagros forests, Iran

Mehdi Zandebasiri\* and Fateme Azhdari

Department of Forestry, Natural Resources Faculty, Behbahan Khatamolanbia Technology University, Iran.

Accepted 03 November 2021

Zagros forests, located in the western part of Iran. Up to now, enough attention has not been paid to the demands of stakeholders and participatory management in Zagros forests. The main objective of this research is studying the demands of various stakeholders in Zagros forests to determine the communication gaps and problems of participatory management. This research was carried out in Dashte-Barm watershed of Fars province, south-west of Zagros forest. In this research, with the questionnaire design based on Likert scale, the stakeholder' demands of forest management plan (FMP) were studied. The result of research show the decentralization of management is most important element of stakeholder demands. Decentralization of management include giving the right of suffrage to the local resident, attention to traditional knowledge, participatory management and delegating authority to local units. It is important that the local inhabitants have the opportunity to periodically review the actions of municipal authorities and community representatives. No effort can succeed if the majority of the local inhabitants must follow rules and regulations that others can circumvent, thereby reaping lion's share of the benefits.

**Key words:** Decentralization of management, Likert scale, traditional knowledge, participatory management.

## INTRODUCTION

### Introducing the Zagros forests

Zagros forests, located in the western part of Iran. These forests characterized by a semi-Mediterranean climate, are one of the most important and sensitive ecosystems in Iran. These forests are about 5 million ha, occurring in the north-western part of country. The main tree species in these forests are *Quercus* spp (oaks) (Purhashemi et al., 2004). These forests do have very important non-market values include restorative and protective significance. Around 40% water resources of Iran results from this region. In addition, these forests have social function. Local resident depend on forest recourses (Jazirehei and Ebrahimi, 2003).

Forests and Rangelands in Iran nationalized through

legislation passed in 1963. More than 1.7 million ha of the Zagros forests has destroyed since 1963 (Ghazanfari et al., 2004). Zagros forests involve some kind of conventional ownership by communities within village. Current forest utilization practices are traditional and support subsistence livelihoods (Ghazanfari et al., 2004).

For more than 40 years, the government of Iran's forest and rangeland organization (FRO) has tried to stop deforestation and manage the Zagros forests through different forest management plans (FMPs), but none of the FMPs has been successfully implemented (Jazirehei and Ebrahimi, 2003).

Up to now, enough attention has not been paid to the demands of stakeholders and participatory management in Zagros forests. The main objective of this research is studying the demands of various stakeholders in Zagros forests to determine the communication gaps and problems of participatory management.

\*Corresponding author. E-mail: Mehdi.Zandebasiri@yahoo.com.  
Tel: 09166699017. Fax: 06712231662.





**Table 1.** Demands of different stakeholders.

Stakeholders	Demands
Local resident	Decentralization of management, design A sylvopastoral system in forest
Executive management (Kazerun natural resources office and Iran's forest and rangeland organization)	Forest preservation, design a system management and land use planning and Planning for ecotourism
Tourism sector	Planning for ecotourism, forest preservation
Agricultural sector	Design a sylvopastoral system in forest, design a system management and land use planning
Research sector	Decentralization of management, forest preservation, design a sylvopastoral system in forest.

**Table 2.** Main elements considered by stakeholders involved with the care they (total number in Likert scale).

Factors	The importance quantity
Decentralization of management	47
Forest preservation	39
Design a sylvopastoral system in forest	24
Design a system management and land use planning	20
Planning for ecotourism	16

Public participation in policy planning and policy implementation, the essence of democratic civil society, faces many constraints in contemporary public governance systems. Participatory in which the local communities have authority to manage the forest (Nordström et al., 2010). Policy goals of such decentralization efforts are often multi-faceted, aiming to better conserve forest resources while also improving the livelihoods of local forest dependent households. At least 22% of forest area in developing countries is now owned or managed by communities (Hayes and Persha, 2010).

Decentralization can increase democratization of forest management by allowing local populations to make decision on the control and use of local resources. Development of forest management to local governments may also provide local communities with new revenues and contribution to the more equitable distribution of benefits (Anderson, 2003).

With decentralized forest management, local people may feel a greater sense of ownership of rules for resources use and be more engaged in their implementation, monitoring, and enforcement (Nygren, 2004). Decentralized is also considered to make it easier for marginalized groups to influence environmental policies. On the other hand, local governments may be more subject to bribery and political pressure from local

resources users, or they may be captured by political elites who promote hierarchical relations instead of democratic participation and political accountability (Atmis et al., 2009).

Decentralization of management to local people and the research sector is joint demand (Table 1). Unlike some of the executive management, research sector has studied on traditional knowledge and participatory management. In order to achieve participatory management, traditional knowledge should be considered serious.

To participatory management, traditional knowledge (TK) is largely dependent (Elbakidze and Angelstam, 2007). Traditional knowledge generally refers to the long-standing traditions and practices of certain regional, indigenous, or local communities. TK also encompasses the wisdom, knowledge, and teachings of these communities. In many cases, TK has been orally passed for generations from person to person (Parrota, and Agnoletti, 2007). As a consequence, the knowledge required to realize sustainable forest management is heterogeneous, and dependent on sets of values with different spatial and temporal scale dimensions.

Moving into the post-industrial society, ecological dimensions became included in the definition of SFM in the 1990s. More recently also the role of the social and cultural aspects of SFM in the overall goal of sustainable



- (i) Manipulative participation: the people's representatives on the official board are not elected and have no power.
- (ii) Passive participation: people are simply told what has been decided in a unilateral announcement made by administrators.
- (iii) Participation by consultation: people are consulted and analysis and decisions are made by external agents.
- (iv) Participation for material incentives: people contribute resources (e.g., field and labor), and receive cash, food and other material incentives. They have no ability to prolong participation incentives when the incentives end.
- (v) Functional participation: participation by the people is an answer to predetermined objectives made by external agents. They may be involved in the decision-making, but only after major decisions have been made. They may be co-opted.
- (vi) Interactive participation: people participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is a right, not a means to achieve a goal. A group takes control over local decisions and resources. They have a stake in maintaining structures or practices.
- (vii) Self-mobilization: independent initiatives by the people take place. Contact with external institutions is based on the needs of the people. They retain control over decision and resource use. Facilitation comes from the outside. The structure and distribution of wealth and power may or may not be challenged from within (Nanang and Inoueb, 2000).

The current management of the Zagros forests in the foregoing discussion is far different from the previous management. Zagros forest's management should strive to be a gradual process one after another. To achieve the previous indicators, it is necessary for this regime to have a decentralized management structure.

When assessing the success of decentralization and community-based forest management, considerable attention needs to be focused not only on the entire spectrum of actors with divergent interests, but also on the social and political processes through which these actors interrelate, along with the institutional mechanisms that shape their interactions (Nygren, 2004).

Although there are no simple recipes for democratic decentralization and creation of viable form of integrative development, the following recommendations are worth considering. Efforts to achieve inclusive and participatory forest management at the local level should be tailored to deal effectively with the local sociopolitical power structures that would frustrate them.

Populist agendas for grass root participation and community action should be replaced by realistic strategic that recognize the needs and goals of multiple actors with differentiated resource interests (Anderson, 2003). As opportunities to manage and control forest resource are undoubtedly influenced by the existing distribution of power, it is important to ensure that the institutions regulations local resources use include

legitimate representation of the less powerful segments of the local population as well (Balana et al., 2010).

No effort can succeed if the majority of the local inhabitants must follow rules and regulations that others can circumvent, thereby reaping lion's share of the benefits. Most of the local people have their own systems and practices for managing the forest. They have abundant knowledge of the forest environment and a strong commitment and responsibility to maintain the forest because their lives depend on it.

Unfortunately, in many cases the local systems and practices cannot be fully applied due to constraints and pressures from outside these communities (Hayes and Persha, 2010). In this respect, a more integrated forest management plan in Zagros forest should be developed by forest authorities together with the local people, and non-timber forest products, such as resin, carbon and firewood should be included in this plan. Such a plan could help the municipal authorities and local resources users to recognize the ways different forest activities complement and compete with each other in the local livelihood strategies.

Establishment of more secure usufruct rights for local residents to forest resources could help to prevent outsiders from gaining unfair or undesirable access these resources. It is important that the local inhabitants have the opportunity to periodically review the actions of municipal authorities and community representatives.

## ACKNOWLEDGEMENTS

The authors would like to thank local people in Dashtebarm forests and other stakeholders in this region who availed use their time during field data collection for this study.

## REFERENCES

- Adhikari JR (2001). Community Based Natural Resource Management in Nepal with Reference to Community Forestry: A Gender Perspective. *J. Environ.* 6(7):9-22.
- Anderson K (2003). What motivates municipal governments? Uncovering the institutional incentives for municipal governance of forest resources in Bolivia. *J. Environ. Dev.* 12(1):5-27.
- Atmis E, Günşen B, Bayramoğlu B, Lise W (2009). Factors affecting forest cooperative's participation in forestry in Turkey. *Forest. Pol. Econ.* 11:102-108.
- Aoudji A, Adégbidi KNA, Ganglo JC, Agbo V, Yévidé ASI, Cannière CD, Lebailly P (2011). Satisfaction across urban consumers of smallholder-produced teak (*Tectona grandis* L.f.) poles in South Benin. *Forest. Pol. Econ.* 13(8):642-651.
- Balana B, Mathijs E, Muys B (2010). Assessing the sustainability of forest management: An application of multi-criteria decision analysis to community forests in northern Ethiopia. *J. Environ. Manag.* 91:1294-1304.
- Cuizon R (2007). Community based forest management policy and the cultural practices of the Sama Taribe. *Lic. J. High. Educat. Res.* 5(1):154-161.
- Davis LS, Johnson KN, Bettinger PS, Howard TE (2001). *Forest management to sustain ecological, economic and social values.* McGraw- Hill. p.804.

- Elbakidze M, Angelstam P (2007). Implementing sustainable forest management in Kraine's Carpathian Mountains: The role of traditional village systems. *Forest. Econ. Manag.* 249:28-38.
- Ghazanfari H, Namiranian M, Sobhani H, Mohajer MR (2004). Traditional forest management and its application to encourage public participation for sustainable forest management in the northern Zagros mountain of Kurdistan province, Iran. *Scand. J. Forest. Res.* 19(4):65-71.
- Jazirehei MH, Ebrahimi RM (2003). *Silviculture in Zagros*. University of Tehran. (In Persian). p. 560.
- Kangas A, Saarinen N, Saarikoski H, Leskinen LA, Hujala T, Tikkanen J (2010). Stakeholder perspectives about proper participation for Regional forest Programmers in Finland. *Forest. Pol. Econ.* 12(3):213-222.
- Kant S, Susan L (2004). A social choice approach to sustainable forest management: an analysis of multiple forest values in Northwestern Ontario. *Forest. Pol. Econ.* 6:215-227.
- Harrison S, Herbohn J, Niskanen A (2002). Non-industrial, Smallholder, Small-scale and Family Forestry: What's in a Name? *Small-scale. Forest. Econ. Manag. Pol.* 1(1):1-11.
- Hayes T, Persha L (2010). Nesting local forestry initiatives: Revisiting community forest management in a REDD+world. *Forest. Pol. Econ.* 12:545-553.
- Hickey GM, Innes JL, Kozak RA (2007). Monitoring and information reporting for sustainable forest management: A regional comparison of forestry stakeholder perception. *J. Environ. Manag.* 84:572-585.
- Marshall NA, Marshall PA (2007). Conceptualizing and perationalizing Social Resilience within Commercial Fisheries in Northern Australia. *Econ. Soc.* 12(1):1-14.
- Kline JD, Alig RJ, Johnson RL (2000). Fostering the Production of Nontimber Services Among Forest Owners with Heterogeneous Objectives. *Forest. Sci.* 46(2):302-311.
- Nanang M, Inoueb M (2000). Local Forest Management in Indonesia: A Contradiction between national forest policy and reality. *Int. Rev. Environ. Str.* 1(1):175-191.
- Nordström EM, Eriksson LO, Öhman K (2010). Integrating multiple criteria decision analysis in participatory forest planning: Experience from a case study in northern Sweden. *For. Policy Econ.* 12(8):562-574.
- Nygren A (2004). Community-based forest management within the context of institutional decentralization in Honduras. *World Dev.* 33:639-655.
- Parrota JA, Agnoletti M (2007). Traditional forest knowledge: Challenges and opportunities. *Forest. Econ. Manag.* 249:1-4.
- Purhashemi M, Mohajer MR, Zobeiri M, Zahedi G, Panahi P (2004). Identification of forest vegetation units in support of government management objectives in Zagros forests, Iran. *Scand. J. Forest. Res.* 19(4):72-77.
- Purnomo H, Mendoza GA, Prabhu R, Yasmi Y (2005). Developing multi-stakeholder forest management scenarios: a multi-agent system simulation approach applied in Indonesia. *Forest. Pol. Econ.* 7:475-491.
- Salam MA, Noguchi T (2006). Evaluation capacity development for participatory forest management in Bangladesh Sal forest based on 4RS stakeholder analysis. *Forest. Pol. Econ.* 8:785-796.
- Shrestha RK, Janaki RR, Alavalapati R, Kalmbacher S (2004). Exploring the potential for silvopasture adoption in south-central Florida: an application of method. *Agric. Syst.* 81(3):185-199.