

Managing Conflicts in Forest Resource Management – Perspectives of foresters from Tripura

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Abstract

The article attempts to assess the foresters' (from north-eastern state of Tripura in the country India) perspective on basic element of conflict management and related framework/process- like a consensus process or stakeholder negotiation etc. It also attempts to capture their perspective on different aspects including desirability of conflict, their capability to distinguish substantive or emotional dimension of issues, basic reasons for conflict, effectiveness in real life situations, and overall usefulness of conflict resolution techniques in Forest Resource Management, their ability to distinguish different types of conflict and choosing appropriate options in conflict management, their understanding of principles involved to reduce forestry resource based disputes / conflicts. The article also assess perspective of practising foresters, whether their hierarchical division has any effect on related use of strategies to reduce forestry resource based disputes / conflicts.

Key words

Forestry, conflict resolution, perception of foresters, Tripura, forest managers / foresters.

Background

The immense diversity of social / cultural characteristics and interests among people managing the use of forest, leads to circumstances, where conflicts are often unavoidable. Some principles and tools of conflicts management have been used by the practising foresters to promote positive social change in such a way that the destructive consequences often associated with the escalation of conflicts, is prevented.

Such conflicts are a normal feature of Forest resource management because: Overlapping of ecological systems and social structures in many ways result in conflicts; also many a time finite forest resources result in competition between individuals, groups and institutions among stakeholders.

The forest plays very important roles in socio- economics of the people. The forest resources are valued differently depending on the varying interests of individuals, groups and other stakeholders. Thus, Forest resource management based conflicts can

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be due to different interests in the resource; the ways in which resources are valued (particularly culturally or socially) and due to personalities (particularly leaders of groups and organizations). Conflicts also reflect the underlying power structures in our societies.

Attitudes towards adopting and using different frameworks for addressing conflicts in forest management situation vary among individuals, among groups and across cultures (Means, et al. 2002). However the strategy for conflict management used can be dependent upon various factors, some are listed below, Means, et al (2002):

- Preference and familiarity leads to certain practices
- Concern for maintaining relationship
- The knowledge and understanding of the options
- The urgency and need to manage or resolve the conflict
- The perceived chance of success, contrasted with the risks associated with particular strategy
- Changing circumstances surrounding the dispute, such as intensification of conflict or outbreak of violence
- The desirability of legal enforcements of a decision

The contexts for conflict differ widely and so is their management strategy and the context, this prompts a forester to assess the strength and weakness of a strategy or approach to be chosen by him. Hence, almost all the conflict management tools/strategies are adaptive and dynamic in the context of forestry. Thus in determining an appropriate tools/strategy; there can not be any one right way and the choice is decided on social-cultural and political context, consistent with the preferences and resources of the stakeholders; their power differentials, the stage and twisting of the conflict and their level of trust.

The article discusses the various dimensions of conflict management in forestry resource management, particularly in north-eastern state of Tripura in India. In this background, how an average forester in Tripura (based on their hierarchy and age), uses his knowledge and skills and what is his understanding about concepts and tools for conflict resolution in Forest resource management scenario - is subject of study of this paper. The practising foresters have outlined their preference for a range of approaches, for managing conflict in forestry resource management. It attempts to assess the foresters' perspective about their understanding of basic element of conflict management and related framework, like a consensus process or stakeholder negotiation etc. It also discusses the perspective of foresters regarding desirability of conflict, their capability to distinguish substantive or emotional dimension of issues, basic reasons for conflict, effectiveness in real life situations, and overall usefulness of conflict resolution techniques in Forest Resource Management, their ability to distinguish different types of conflict and choosing appropriate options in conflict management.

The result provides an insight to analyze the complexity of conflict management in forestry environment, offering some clue that which strategy can be useful in practical conflict mitigation and prevention situations. The reason for choice of a particular approach given by the respondent to manage the forestry based disputes – is probably based on their experiences as how to respond most appropriately.

Area of Study

The State of Tripura, borders the Indian State of Assam, Mizoram on north, and Bangladesh on West and South of it. The state is predominantly hilly with about 60% of landmass being covered with hills. The forests in the state are mainly tropical evergreen, semi evergreen, and moist deciduous with sizeable area under bamboo brakes, which virtually form a “Sub climax” resulting from shifting cultivation from time immemorial. The state has 60 % of geographical area as legal forest land. Tripura state possesses rich biodiversity, which is under increasing threat from various biotic and abiotic factors.

Review of literature

Very limited studies have been undertaken in past based on exploring empirically the forester’s perceptions about different dimensions and aspects of conflict resolution or assessing the perception of foresters in India and particularly in the Indian state of Tripura.

Effective conflict management requires the understanding of underlying dynamics of the conflict by higher level forest managers and this study enumerates a few such conflicts and tries to analyse the dynamics from management prospective, with an eye on possible solutions in the context of Tamilnadu, Singhar et al (2002).

Another study in Himachal Pradesh tried to investigate the perceptions of Indian Forester on different aspects of Joint Forest Management including conflict resolution, Sood et al (2007).

Certain issues, considered important in forestry decision making have received only limited attention by the Dutch foresters, Hoogstra et. al (2008).

Methodology

The study has been undertaken on the premise that forest management often takes place against a backdrop of simmering or outright conflict and that the skills of foresters gets tested in finding solutions to difficult problems posed by parties related to forest. It is also recognizes that foresters work in situations where conflict is an ever-present and that a better understanding of the group dynamics involved, would improve the effectiveness of their responses.

A training workshop for conflict resolution in forestry was held at NTFP Centre, Agartala, the capital of Tripura from 7-9 January 2009. The Tripura States Forest Department having identified a need to provide key frontline staff with conflict management techniques made nominations of their 19 staff, who were surveyed for this study. For

this the participants were administered a questionnaire which are measured on 5-point likert scale.-

The participants, were classified into two major groups, one by rank i.e. 6 in supervisory or higher rank and the rest 13 were of executive or lower rank. They were further segregated into three classes based on their years of experience- Group1 having up to 14 years of experience, Group 2 having 15-27 years of experience and Group 3 having 28 and more years of experience.

Based on this rationale, the present study has aimed to get an understanding of Foresters at field level, in the given context of the nature and dynamics of the conflicts that they encounter during the course of their work; and further offer suggestions which can help equip these frontline and supervisory forest managers / foresters with skills and knowledge that can help them to analyse and manage forestry related conflicts in better manner.

Result and Analysis

In questionnaire based survey approach foresters were questioned on certain issues of conflict management in forestry context and for their perceptions.

The analyzed results indicate an interesting views / perception of foresters from Tripura; on issues related to conflict resolution in forestry situations. The segregation of group, according the rank and experience, has brought out some differences in perceptions- which have been analyzed, both qualitatively and quantitatively.(see Table 1)

The analysis of responses indicate that for question no. 1 mean value is 3.263 (sd 0.3138), this indicate that the overall group is in medium agreement with the proposition that conflict is desirable in day to day life.

When looking at the segregated perspective, on the basis of the job category, the senior forest officials have mean value of response as 2.17 (sd .983) and the junior forest officials have mean value of 3.77 (sd 1.235). The possible explanation for this perception of the junior foresters that it is more desirable in day to day life as compare to senior ones is probably they being at the field level, their encounters with conflict situations is much common and that reflects into their response.

Similarly, the group when divided according to their years of experience, the group no. 1(with years of experience, 1-14) has mean value 3.83 (sd 1.602), the group no.2 (with years of experience, 15-27) have mean value 2.50 (sd 0.837) and group no. 3(with years of experience, 28 and above) have mean value 3.43 (sd 1.397). It indicates that both, very experienced and low experienced foresters tend to agree more with the proposition. The possible explanation for this trend could be that the less experience people accept the conflict more common in day to day life and more experience foresters have experienced it.

Question no. 2 attempted to assess, whether they could distinguish between “Substantive” and “emotional” issues in forest management conflict situations. The general perception of group is reflected by the mean value of response is 3.05(sd 0.970). Thus it appears that the respondents are in medium agreement with the proposition.

When segregated into senior or junior rank, the mean value of response of senior forester is 3.00 (sd 0.632) and mean value of junior is 3.08 (sd 1.115).As the difference

is very marginal, it can be said that the rank does not reflect in their capability to distinguish issues.

When segregated on the basis of years of experiences, the group 1 response has mean value of 2.67 (sd 1.033) , group 2 is 3.33 (sd 1.033) and of group no. 3 is 3.14 (sd 0.9). The pattern of response indicates that the foresters with more years of experiences are in position to distinguish between “Substantive” and “emotional” issues, because of their long years of experiences.

Question no. 3A makes an attempt to assess the important reasons for conflict in forest management situations – and whether lack of information / knowledge can be one important reason. The mean value of response for overall group is 3.74 (sd 1.098). This response indicates that the foresters in Tripura tend to agree in this reason quite highly. When the same responses were segregated into senior and junior rank– the mean value for the seniors was 3.00 (sd 1.265) and for juniors mean value is 4.08 (sd .862). This is probably explained by the fact that the junior forester attribute lack of information and knowledge for conflict situation, may be their limited access to information / knowledge due to their being in junior level explains it.

When segregated according to experience, the mean for group 1 was 4.33 (sd .816), for group 2 is 3.33 (sd 1.506) and for group 3 mean is 3.57 (sd 787). The highly experienced foresters attribute less importance to lack of information / knowledge for important reason for conflict, compared to the less experience ones. This is explained by the fact that the large experience compensates for information and knowledge.

The Question no. 3B., attempts to assess the reason – “clash of personal interest”, being the major reason for conflict in forestry situation. The mean value of response for the overall group is 3.11 (sd 1.150). This indicates that view of the group is in near agreement with proposition.

When segregated into rank, the response of senior foresters had the mean value of 2.50 (sd 1.378) as compare to junior rank foresters is 3.38 (sd .961). This indicates that the junior level officers attribute “clash of personal interest” as major reason for conflict in forest management situation.

When segregated according to years of service, the group 1 have mean value of 4.00 (sd .632), the mean value of group 2 is 2.50 (SD 1.049) and mean value of group 3 is 2.86 (SD 1.215). This indicates that the “clash of personal interest” not a major reason of conflict according to very experienced foresters as compare to the less experienced foresters.

Question no. 3C – Wanted to assess the perception of respondent, as how important the “Strained relations” are reason for conflict in forest management situation. The overall mean value of response is 3.00 (sd .943). This indicates that the respondents are in medium agreement to this proposition.

However, when the respondent were segregated by rank, the mean value of high rank foresters is 2.67 (sd 0.816), whereas for the lower rank foresters - mean is 3.5 (sd 0.986). This indicates that for the lower rank foresters “strained relation” is a major cause for conflict compared to high rank foresters.

Further, when the responses where analyzed according to experience gradation, the mean value of response for group 1 is 3.67 (sd 0.816), for group 2 is 2.67 (sd 0.816) and for group 3 is 2.71 (sd 0.951). This indicates that foresters with less experience

have higher belief that strained relation is a major cause of conflict, compared to more experienced foresters.

Question 3D – Also wanted to assess as how important “clash of values” factor is, for conflict in forestry situation. The mean value of response of the overall group is 3.21 (sd 0.787). This indicates that the whole group is in medium agreement to this proposition. When the respondents were categorized according to their ranks, the mean value of response of high rank foresters is 3.17 (sd 0.753) and mean value of low rank foresters is 3.23 (sd 0.832). This shows that both high rank and low rank forest officials attribute equal importance to the reason of “clash of values” for major reason of conflict.

When the responses were analyzed according to experience, the mean value of response for group 1 is 3.33 (sd 0.516), for group 2 is 2.67 (sd 1.033) and for group 3 is 3.57 (sd .535). This indicates that the respondents with low experience and high experience, both accord higher importance to this reason i.e. “clash of values” as major cause of conflict compare to foresters with medium experience.

Question no. 4 – Wanted to assess how many of them have ever used the skills related to negotiation / mediation for resolving the conflict in forestry situation and 94.73% responded affirmatively. Further, there is not much change in their response pattern, when segregated according to rank and according to experience.

Question no. 5 – further wanted to assess that efficacy of negotiation / mediation skills in resolving conflict in real life forestry situation. The mean value of response for the overall group is 3.84 (sd 0.834). This indicates that the whole group is in high agreement to this proposition and perceives it quite effective.

However, when the responses were classified according to rank the mean value of response for high rank foresters is 3.83 (sd .753) and for low rank foresters is 3.85 (sd .808). This indicates that both the higher and lower rank forest official found the negotiation / mediation skill equally effective for conflict resolution.

When the responses of the group were segregated according to years of experience, the mean value of response of group 1 is 3.67 (sd 1.033) for group 2 is 4.00 (sd 0.894) and for group 3 is 3.86 (sd 0.690). This indicates that the foresters with higher years of experiences believe more that the negotiation / mediation skills are more effective for resolving any conflict in forestry situation compare to lower years of experience. The growing maturity with the age and experience could be possible reason for this trend in response.

Question no. 6 - Wanted to assess the ability of respondent to distinguish “demand and interest” while resolving any conflict, which is a very important skill for reaching to a long term and effective conflict resolution solution. The overall mean value of response of the group is 1.58 (sd 0.838). This indicates that the group as a whole a low understanding of distinction between demand and interest. As a logical consequence, they must appreciate and understand the difference between demand and interest in order to become a good conflict resolving forest manager.

The responses when analyzed according to the rank, the mean value of response for high rank forest official is 1.67 (sd 0.816) and for low rank forest officials is 1.54 (sd 0.877). The slightly better understanding of high rank forest officials is because of their higher qualification, higher exposure and better vision.

When the responses of the group were analyzed according to years of experiences, the mean value of response of group 1 is 2.00 (sd 1.095), for group 2 is 1.50 (sd 0.837)

and for group 3 is 1.29 (sd 0.488). This indicates that the foresters with less years of experience are in better position to distinguish between the demand and interest, compared to more experienced foresters. This indicate that year of experiences has not led to better ability to distinguished demand and interest.

Question no. 7 – Wanted to assess the usefulness of various tools for tools and technique for conflict resolution for a forester. The overall mean value of response is 3.47 (sd 0.513). This indicates that the foresters are in high agreement to this proposition.

Further, when the responses were analyze according to the rank, the higher rank foresters and mean value of response is 3.50 (sd 0.548) and for low rank foresters is 3.46 (sd 0.519). This indicates that the rank of a forester has little effect on the response.

When classified according to age the foresters of group 1 mean value of response is 3.50 (sd 0.548) for group 2 is 3.67 (sd 0.516) and for group 3 is 3.29 (sd 0.488). This indicates that the forester with very high experienced have slightly less faith in usefulness of various conflict resolution techniques as a forester compared to their less experienced colleagues.

The statistical analysis of above result is

Table :1

	Overall	Based on Rank of Foresters		Groups based on years of experience, Gradation class		
		Supervisory or higher rank	Executive or lower rank	1	2	3
Question	Mean(sd)	Mean(sd)	Mean(sd)	Mean(sd)	Mean(sd)	Mean(sd)
1	3.26(0.313)	2.17 (0.983)	3.77 (1.235)	3.83 (1.602)	2.50 (0.837)	3.43 (1.397)
2	3.05(0.970)	3.00 (0.632)	3.08 (1.115)	2.67 (1.033)	3.33 (1.033)	3.14 (0.9)
3a	3.74 (1.098)	3.00 (1.265)	4.08 (0.862)	4.33 (0.816)	3.33 (1.506)	3.57 (0.787)
3b	3.11 (1.150)	2.50 (1.378)	3.38 (0.961)	4.00 (0.632)	2.50 (1.049)	2.86 (1.215)
3c	3.00 (0.943)	2.67 (0.816),	3.50 (0.986)	3.67 (0.816)	2.67 (0.816)	2.71 (0.951)
3d	3.21 (0.787)	3.17 (0.753)	3.23 (0.832)	3.33 (0.516)	2.67 (1.033)	3.57 (0.535)
5	3.84 (0.834)	3.83 (0.753)	3.85 (0.808)	3.67 (1.033)	4.00 (0.894)	3.86 (0.690)
6	1.58 (0.838)	1.67 (0.816)	1.54 (0.877)	2.00 (1.095)	1.50 (0.837)	1.29 (0.488)

Conclusion

The statistical analysis indicates that there is a significant difference between the foresters and forest range officers on the issue that conflicts are desirable in day to day life (Mann-Whitney U=12.5; p-value = 0.017). The possible explanation for this

perception of the junior foresters that it is more natural for them as in day to day life as compare to senior ones is probably they being at the field level, their encounters with conflict situations is much common and that reflects into their response. However it was found that there is no significant differences due to rank or age class on the perception on other dimensions of conflict management in forestry,

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