

Involvement of Local Communities in the Conservation of Forest Resources: Issues in the Design of a Sustainable Model Framework

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ABSTRACT

For centuries and prior to the British rule, all sections of the Indian society enjoyed a fair share of the forest resources. Researchers argue that prior to the British period the practices of the state machinery aimed at fair distribution of returns, and acknowledged the importance of communal forest regimes. During the British period, the administrators dismantled prevailing concepts of social utility and social welfare, including those that ensured a fair distribution of returns from forest resources. The sole purpose of forest management sought to redistribute economic gains in favor of the empire. Thus, during this period, forest management was converted from a community-based regime to one of central control.

After independence, the Government of India tried to redefine the social-utility and social-welfare functions; but the emphasis of forest management regimes continued to be on commercial timber exploitation and exclusion of local people from forest. This approach led to the emergence of many socio-economic problems. In the late 1970s and early 1980s, across India, there was a sudden emergence of forest protection initiatives in response to growing forest product scarcities and threats of exploitation by outside groups. These community actions indicated the conflicts between formal and informal institutions, and inefficiencies in the existing forest regimes. The Government of India realized the failure of forest regimes based on exclusion of local people in the National Forest Policy 1988; and sought people’s participation as a means for conserving existing forestlands and regenerating wastelands.

This changing approach has resulted in the new approach known as Joint Forest Management (JFM). This approach is however, not a special case of India. For the conservation of forest resources, other countries have adopted similar participatory approach as well. This paper discusses the important achievement, failures of the

above JFM approach and has tried to discuss the issues that need to be tackled in building a sustainable participatory model.

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1.1 INTRODUCTION:

In the modern history of forest management in India, the British period draws a special consideration. During the British period, the administrators dismantled prevailing concepts of social utility and social welfare, including those that ensured a fair distribution of returns from forest resources. The sole purpose of forest management sought to redistribute economic gains in favor of the empire. Thus, during this period, forest management was converted from a community-based regime to one of central control (Tiwari, M 2004).

Just after the independence, India passed the National Forest Policy (NFP) of 1952. The policy classified forests into four functional types: protection forests, national forests, village forests and tree-lands. In reality, this new classification was in no way much different from the British provision as was laid in the Indian Forest Act of 1927. The only difference was the introduction of last category as a new functional category (Balooni, K 2002). It was therefore evident that the NFP of 1952 did not serve any purpose other than the exploitation of forest resources for the benefit of a few private industries. Evidences suggest that during the 1950s, the paper industry was procuring bamboo at a price of Re 1 (One Rupee) per ton against the prevailing market price of over Rs 2000 (Rs. two thousand) per ton. This huge provision of state subsidy induced “profitability of forest-based industries” and resulted in the “explosive growth in industrial capacity and a non-sustainable use of forest stocks” (Gadgil & Guha 1992, in Balooni, K 2002).

Such huge subsidies had serious repercussions. On the one hand, it affected forest-dependent communities to the adverse; while on the other led to the further degradation of forests. Such circumstances led to several people’s movements in protest against state policy, especially between the 1970s and the 1980s. In what became world known as the Chipko Movement (Chipko meaning ‘to cling to’ or ‘to hug tight’), village women hugged the trees, interposing their bodies between the trees

and the contractors' axes, to prevent them from being cut. This movement started in the Himalayan state of Uttaranchal in March 1974, later replicated in other states in India in an organized manner (Balooni, K 2002; Rajagopalan, R 2005; Sundar, N et al, 2001). The Chipko Movement achieved a major victory in 1980, when the government of Uttar Pradesh placed a 15-year ban on tree felling in Himalayan forests. This movement also encouraged many of the peoples' movement to save their environment in the later period. It is true that peoples' emotional and/or rational involvement to protect forests has led to formulation of policy measures to involve people in forest management.

This concept of Community Based Forest Management (CBFM) has been given different names in different countries. It is true that many of the forests in India have, at different points in the nation's history, been managed under a set of rules and regulations developed by different communities. Even today, some of these so-called self-initiated forest protection groups have survived or have been re-invented in response to the need of the hour to conserve community forests (Balooni, K 2002). Thus, it can be argued that participatory/joint forest management is not a 'new' concept to India; it is rather a re-invention of the erstwhile successful forest management practices. The changing approach of Government of India in the framework of Joint Forest Management (JFM) basically aims at promoting sustainable forest resource management. This paper discusses about the issues involved in this framework of JFM. To what extent JFM has been successful and what are the areas that need to be taken care of? The paper specifically tries to tackle the important policy issues in the design of a sustainable model framework (especially in the context of JFM) that stems from the involvement of local communities in the conservation of forest resources. The remaining discussion of this paper has been divided into five parts. The *second* section discusses about the methodology of the paper. The *third* section discusses about some of the important basic concepts viz., the concept of sustainable forest management and the related concepts of CBFM in India. The *fourth* section discusses about the important macro issues in the design of a sustainable model framework (especially in the context of JFM) that stems from the involvement of local communities in the conservation of forest resources. The *fifth*

section discusses about the policy recommendations and the paper concludes with discussion of model framework in section *sixth*.

1.2 METHODOLOGY:

This paper is basically based on review of earlier literature in the field. It also utilises relevant secondary data from reliable sources. Relevant studies, especially based on Nepal have also been reviewed to make comparative analysis. This has been done keeping in view close socio-economic, geographic and other cultural proximities between these two countries. Remarkable achievements achieved by Nepal in CBFM (called as collaborative forest management (CFM)) is another motivating factor in this regard.

1.3 IMPORTANT BASIC CONCEPTS:

Sustainable forest management:

Rajagopalan, R (2005) has described sustainable forest management (SFM) as “*the sustainable use of the world’s forest resources in such a way that they continue to provide resources in the present, without depriving the future generations of their use.*” It includes all the three components of sustainability, viz. ecological, economic and socio-cultural well-being. The International Tropical Timber Organization (ITTO) defines SFM as:

‘the process of managing permanent forest land to achieve one or more clearly specified objectives of forest management with regard to the production of a continuous flow of desirable forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment’. (Quoted in: Rawat et al., 2008).

One of the principles of SFM is the full involvement of the local community in the forest management process. This has been difficult in some cases, especially when the forest departments (FDs) are reluctant to lose their control over forest resources.

In recent times, SFM has become important in climate change negotiations as well. This is because as per Kyoto Protocol, countries reap benefit if their forest environmental benefit to the world. The industrialized countries today therefore have

come forward to finance SFM activities in the developing countries (Rajagopalan, R 2005).

Community based forest management:

Loosely speaking, community based forest management (CBFM) means involving the local communities in the management of the forest resources. In India, forest protection movement has experienced three distinct types of CBFM (Sinha, H 2006). The *first* type of CBFM has emerged out of local initiatives as a reaction to growing stress owing to rapid degradation of forest. The Chipko movement and other such movements we have already mentioned fall under this category. This has been termed as indigenous community forest management (ICFM). The *second* type of CBFM has emerged as a result of active sponsorship of local government and NGOs. During the last two decades in India, such types of CBFM units have increased significantly. This type of forest management is popularly known as crafted community forest management (CCFM). Forest department (FD) of our country promoted the *third* type of CBFM. In this type, forest cooperative societies were formed (also known as *Van Panchayat*). This type facilitated high involvement of local people, but often deprived them of their economic benefit.

Joint Forest Management (JFM) that we see today may be called as a culmination of all the above types. Researchers (Mukhopadhyay, D et al (2007) therefore, rightly argues that JFM in India has served twin objectives: *first*, to reverse the process of forest degradation and *secondly*, to meet people’s need in an equitable manner. It is a device to bring together the Forest Department (FD) and the resource users - the forest community people (FC) through formation of Joint Forest Management Committee (JFMC). JFM is a unique approach and includes both the scientific management techniques and the age old indigenous practices to conserve forest on sustainable basis.

1.4 KEY MACRO ISSUES IN THE DESIGN OF A MODEL FRAMEWORK FOR THE PROMOTION OF SUSTAINABLE FOREST MANAGEMENT IN INDIA (ESPECIALLY IN THE CONTEXT OF JFM):

1.4.1 The Historicity of JFM:

Before discussing about the macro issues relating to the design of a model framework for the promotion of sustainable forest management (especially in the context of JFM, India), it will be better to briefly discuss the historicity of the context that led to the introduction of JFM in the country and the progress it has recorded so far.

The initial strategy to combat forest degradation and to increase forest productivity as suggested by the National Commission on Agriculture (NCA) of 1976 included the strategies like: management of government forest lands for the production of industrial inputs and at the same time adoption of massive social forestry programme. The primary objective of the social forestry programme was reduction of pressure on government forests. But contrary to this objective it was realized that *first*, the Forest Department was unable to control forest degradation as the local communities continued to depend on forests for their needs; and *secondly*, conflicts between the communities and the Forest Department were on the rise (Saigal, Sushi n.d.; Taneja, B 2001). Apart from all these, the fact has also been India occupies only 2.5% of the world’s geographic area and 1.85% of the world’s forest area. But contrary to this, the country owns 17% of the world’s population and 18% of livestock population (Rawat et al, 2008). In such contexts, it had become imperative to preserve manage forests on a sustainable basis, so as to ensure secure livelihood of the forest-dependent communities as well as conserving bio-diversity as well. This led to the introduction of a new forest policy in 1988. This new policy was a complete departure from the earlier ones because of the fact that it stressed on management of forests for conservation and meeting local communities’ needs and made commercial exploitation and revenue generation secondary objectives (Saigal, S n.d.; Khawas, V 2003; Balooni, K 2002).

The essential difference between social forestry and JFM is that while the former sought to keep people out of forests, the latter seeks to involve them in the management of *forest* lands. JFM also emphasises *joint* management by the community and the Forest Department.

1.4.2 Trend and Experiences of JFM:

Data on the following table shows the number of JFMCs in different states and the respective areas of their coverage.

Table 1: Selected State-wise Progress of Joint Forest Management in India (As on March, 2006)

Sl. No	State	JFM Committees (Number)	Membership by Social Groups (Number)			
			Total	SC	ST	Others
1	Andhra Pradesh	8498	1538784	322954	464685	751145
2	Arunachal Pradesh	362	24588	24588	Nil	Nil
3	Assam	700	217973	NA	NA	NA
4	Bihar	615	46893	16694	9541	20658
5	Chhattisgarh	7820	2763100	1436278	1326822	Nil
6	Goa	26	207	125	72	10
7	Gujarat	2124	1045714	113904	451973	479837
8	Haryana	1075	167300	31600	Nil	135700
9	Himachal Pradesh	1749	254350	63046	36878	154426
10	Jammu & Kashmir	4861	268360	19626	70750	177984
11	Jharkhand	10903	218000	119900		98100
12	Karnataka	2254	295646	47628	30051	217967
13	Kerala	561	66022	7365	21952	36705
14	Madhya Pradesh	14428	8984000	1540000	4080000	3364000
15	Maharashtra	11799	2441245	248298	553686	1639261
16	Manipur	283	23958	57	21106	2795
17	Meghalaya	73	7083	Nil	7083	Nil
18	Mizoram	505	181681	110	181571	Nil
19	Nagaland	335	121064	Nil	121064	Nil
20	Orissa	9905	2365404	401986	855466	1107952
21	Punjab	1378	183145	53280	28	129837
22	Rajasthan	4691	509346	59177	244730	205439
23	Sikkim	204	338257	3619 ¹	20640 ¹	60204 ¹
24	Tamil Nadu	2642	793369	219713	53843	519813
25	Tripura	399	39644	9535	23018	7091
26	Uttar Pradesh	2096	155692	29946	5006	20740
27	Uttarakhand	12089	108801	24178	Nil	84623
28	West Bengal	4107	558086	174993	132276	250817
	Total	106,482	23717712	4848700²	8712241²	9465104²

Source: State Forest Department. Available from Ministry of Environment and Forests, GOI.

¹ Figures represent number of families; ² excluding data from Assam & Jharkhand

It is true that the number of JFMCs is necessarily not an indicator of any success of JFM. Researchers has termed the participatory forest management approach of India to be a mix of successes and challenges.

1.4.3 Major Achievements: Various studies (Saigal, n.d.; Danwar K et al, 2007; Sundar, N et al, 2001) have pointed out the following major achievement of JFM in India:

Change in attitude and relationship - JFM programme has been able to change the attitudes of local communities and forest officials towards each other and forests. Certain studies conducted in Himachal Pradesh, Andhra Pradesh and Rajasthan confirm this achievement. Such achievements may be attributed to the large number of training and orientation exercises carried out across different states in the country.

Improvement in the condition of forest - Scientific studies and other more general studies on JFM confirm that the programme has resulted in the improvement in the condition of the forests. This has been experience especially in certain areas of Andhra Pradesh, Rajasthan and Gujarat.

Reduction in encroachment - In several areas, introduction of JFM has also been able to reduce the area under encroachment and decrease the rate of fresh encroachment. Significant achievements have been recorded in the states of Andhra Pradesh and Maharashtra in this regard.

Increase in income - It is true that economic issues are the root of problems in forest resource exploitation and management. It is difficult to achieve sound forest resource management without developing the economy of local communities (A.P.Y Djogo in Brown A.G. Ed, 2001). It is easily understood that the local communities are unlikely to participate in any joint action unless they see some economic benefits. Sharing of economic benefits therefore becomes instrumental in sustaining the achievement of any participatory approach.

Implementation of JFM programme has increased the income of participating communities at several instances. In fact, several externally assisted projects laid emphasis on employment generation and creation of productive community assets as a part of the project. Such achievements in this regard have been recorded in the states, viz. Andhra Pradesh, Madhya Pradesh, Gujarat, West Bengal (Saigal, n.d.) and South district of Tripura (Danwar, K et al, 2007).

Role assigned to Panchayat and NGOs – It is a fact that *Panchayats* are traditional village institutions that have a statutory status, several financial and administrative

powers, and have been asked to play a supervisory role for the forest protection committees (FPCs). However, the exact nature of involvement has not been made clear. This has been the case with NGOs as well. In fact, at the outset of launch of JFM programmes in the country, the Forest Department was skeptical about the role of NGOs. The conflicts arose because the FD was reluctant to relinquish power and/or were also dis-motivated owing to their short-lived, patronizing attitude (Balooni, K 2002; Tiwari, M 2004). However, as time passed, considerable involvement of NGOs in the forestry sector of various states has been recorded (Saigal, n.d).

1.4.4 Major Challenges: Against the above achievements, several key issues have also emerged.

Conflicts - At several places, JFM has resulted in increased inter and intra-community conflicts, which often result in physical violence. Intra-community conflicts mainly emanate from inequitable distribution of costs and benefits of JFM among different subgroups (class, caste, gender etc.) within the community. Inter-community conflicts, on the other hand results from debates relating to boundaries and access rights.

Transparency - There is an urgent need to increase transparency at the field level, especially in areas where large amounts of funds are being provided for JFM through special projects. Some innovative mechanisms to promote transparency such as writing of expenditure and microplan details on village walls have been reported from Uttar Pradesh (Shukla 2001).

Traditional/existing institutions – Recognition of thousands of community groups engaged in self-motivated protection/management of forests is also a felt necessity especially in Orissa and Jharkhand. The new JFM guidelines issued by the MoEF in 2000 do emphasise on the need for "identifying, recognising and registering" these groups but do not offer any practical tips as to how to go about it.

Specific problems relating to specific geographic localities/region have also been experienced. It has been argued that owing to specific socio-economic set-up, the north-eastern states of India require a different JFM approach as compared to other parts of the country (NERFRP, 2001 and Yadav, 2001 in Saigal, n.d.).

Sharing of Benefits from NTFPs: Sharing of benefits from NTFPs is also an important issue. While NTFPs contribute to household income in many places, this contribution is socially and geographically uneven. In India as a whole, NTFP production contributes about 40% of total official forest revenues and 55% of forest-based employment. It is true that the nationalisation of NTFPs and the recent JFM management system in the country provide considerable tenurial security to poor populations in accessing the usufructs. However, due to the lack of value addition to the collected NTFPs and fair marketing system, the collectors benefit little in actual fact (*Ibid, 2004*).

Other important issues that have come up relate to experiences in dense forests and protected forest areas (Saigal, n.d.). Apart from this, project specific issues have also been experienced (Saigal, n.d.).

This paper basically tries to discuss the issues relating to the framework of design of a sustainable forest conservation model based on involvement of local communities. Specific to the issue of involvement of local communities, Sinha, H (2006) has pointed out that apart from the economic factor; peoples' participation in the forest management process is affected by the following ones:

- Formation of forest committee with heterogeneous interest groups;
- Absence of favourable socio-political environment that promotes participation;
- Incompatibility of governing rules with the local socio-cultural concept;
- Absence of participatory leadership with idealised behaviour in forest management;
- Inappropriate inter and intra-community conflict resolution mechanism;
- Lack of awareness regarding environmental protection leading towards incongruent; value system between leaders and other users.
- Tiwari, M (2004) has pointed out that the state machinery continues to follow the 'top-down approaches'. The senior bureaucrats have continued to exercise a top-down approach to managing the JFM programmes. Again, due to lack of explicit instructions, the lower-level officers make several departures from JFM provisions in their day-to-day functions. Many of their formal work styles, such as patrol duties, the manner in which they interact with the

villagers and book-keeping, are replete with methods that have been in existence since the colonial period.

1.4.5 Comparative Analysis: India and Nepal - Issues

Before discussing how to tackle the above factors, we shall discuss the experiences of JFM in the neighbouring country Nepal, which have adopted a similar model of forest conservation akin to India (Kothari, A 2003) called as collaborative forest management (CFM).

Studies conducted by Chakravarti, M et al (n.d.), Kothari, A (2003), Brown, A G (2001) and Tiwari, M (2004) have the following observations:

- User-groups in Nepal receive a greater share of the return from successful management in land held as common village property than those in India.
- As compared to India, the performance of Nepal has been quite remarkable. With very little investment by government, community forest management capacity has been enhanced, some of the mid-hills forests are now richer, and wildlife has significantly increased.
- The Master Plan also attempted to gain higher participation of Nepalese women. It stated that, ‘one third of members of the users’ committees should be women’. Mention about such guidelines in case of India, however was not found.

1.4.6 Comparative Analysis: India and Nepal – Policies and Provisions

In this section, we shall discuss some of the policy measures of the JFM set-up in India and Nepal. This is however, not a comprehensive discussion on policy issues. Only those policy issues have been discussed, which stem from our review of literature.

- Nepal has given more autonomy to its communities as compared to India. In recent years, the country has handed over rights (though not ownership) to some 400,000 ha of national forest to more than 7,000 community forest user groups (FUGs). This has been accompanied by progressive changes in forest-related policy.

- It is also a fact that communities in Nepal get more share of benefit return as compared to India (Chakravarti, M et al, n.d.). In India, this share of benefits varies from state to state and ranges from 20% to 100%. The provision in Nepal however proposes 100% benefit to its forest user communities (FUCs) (Tiwari, M 2004).
- The remarkable success in Nepal can also be attribute to the several supportive programmes designed to support the SFM initiative. The legislation was updated and programmes designed to allow and encourage people to accept full responsibility for the development, management, and protection of community forests.
- One remarkable fact here however is that Nepal has initiated CFM programmes only in its hills districts. Researcher however points out that certain reluctance from the state machinery has been observed to hand over its ‘valuable forests’ in the CFM framework.

1.5 Recommendations

Based on the above discussion, the following measures have been suggested:

- The approach of JFM should be made more participatory in nature. It should be bottom-up approach, rather than a top-down approach. This is because each of the areas in the country has their own socio-cultural set up. Such issues should be duly considered with the involvement of local communities in each of the phases of JFM initiative viz.: policy diagnosis, design, evaluation and implementation.
- Addressing the gender issue is also important. We should not forget that the forest protection movement like Chipko was started by women. Due participation of women in the process should be taken care of and policy provisions should be made accordingly.
- The issue of upper caste dominance should also be properly dealt with. Involvement of weaker section of the society should be efficiently monitored.
- Geographic issues should be adequately considered. What is applicable in a forest in Madhya Pradesh may not be applicable in a forest of Mizoram.
- Benefit sharing should be made more reasonable. While, a certain percentage from it (say 20%) may be utilized for the development of the locality, the

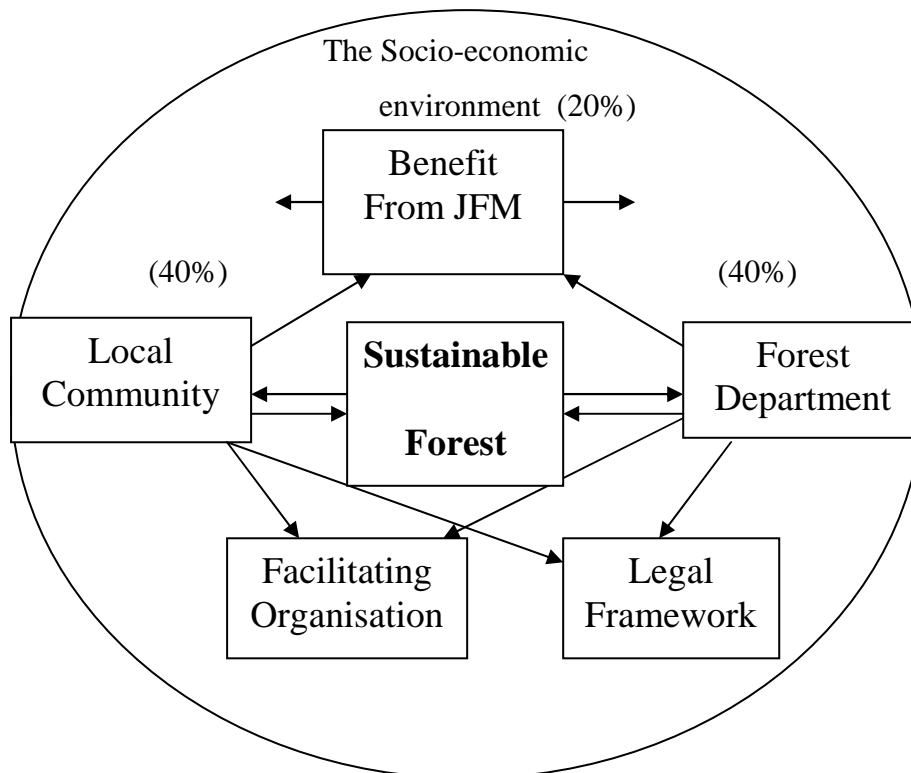
remaining should be shared equal (50-50) between the two major stakeholders: the community and the FD. A minimum of 50% benefit to the participating community should be made mandatory.

- Policy statements regarding NTFPs should be made clear. It is true that the 1990 GOI order on Joint Forest Management has no specific provisions for management and trading of bamboo and it continues to be clubbed with other NTFPs. The bamboo can be very instrumental in providing a reasonable income to the rural poor people. This has been done in China. Through recent policy changes, it has linked rural poor individuals with markets. This has turned the bamboo sector into an efficient competitive business enterprise with holds on important national and international markets, and has resulted in higher profits to stakeholders.
- ‘Code of conduct’ regarding forest harvesting and reduced impact logging (RIL) in tropical forest areas should be developed and followed. Study (Brown A.G, 2001) has shown that following of proper codes may be instrumental for the proper conservation and management of forest resources.
- The forest staff should be made more powerful to face any external challenges from smugglers and others accompanied by intra and inter community conflicts.
- Programmes for communal harmony should be made a part of JFM initiatives, especially in areas having presence of heterogeneous groups.
- In order to support institutional development, many forestry sector policies need to be redesigned. This has become necessary not only to improve their technical and legal aspects, but also to be equip them with clear objectives, instruments and rules to implement the instruments. This should be made a participatory approach.
- Promote institutional collaboration between the private sector, the local community, the government and civil society through sound collective action in forest resource management.
- Improve the capacity of local governments and local organisations such as NGOs and *Panchayat*, empowering local communities in legal aspects and raising their awareness about conservation and forest restoration.

1.6 A Model Framework:

Criteria of the Model Framework:

- Sustainable forest is the centre-stage of all activities.
- JFM is a participatory in all its phases: policy diagnosis, design, evaluation and implementation.
- JFM is a process of two major stakeholders: the local community and the forest department. While facilitating organization are also present in the entire process. They may include: NGOs and/or *Panchayat*. However, the facilitating organization are not entitled to any benefit sharing.
- Of the total benefit, 20% goes to the development of the socio-economic environment. This may include: plantation programmed, development of roads, schools, water facility in the locality. The remaining benefit is shared equally between the community and the FD.
- Local community consists of representation from women and weaker section of the community in all the phases of JFM.



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