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REFERENCE  
ONLY

THE PEOPLE, THE STATE AND  
PARTICIPATORY MANAGEMENT OF COMMON  
AND PUBLIC NATURAL RESOURCES



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Humboldt once remarked, "when a man merely reacts to external demands and authority we may respect what he does but despise what he is"<sup>1</sup>. The statement equally applies to the situation of Indian village communities. The tradition of self-governance for which these communities were noted in the pre-medieval and medieval periods underwent a radical change in subsequent periods, when they lost their dominant property rights over much of their common natural resources. The result was a shift from local management to the larger exogenous management of these resources. Even for those common property resources, over which the local village communities continued to exercise dominant property rights, and manage them through various endogenous systems, the thrust of privatisation and commercialisation proved to be unbearable. This coupled with the decay of endogenous management systems, due to socio-economic forces, have caused the ecological deterioration of these community resources. The net consequence of all this has been that Indian village communities have become mere passive takers/receivers of external demands and authority, a far cry from the notion of 'village republics'. The ideal of 'people's management' has been reduced to 'people's participation' in management. The tragedy is that even this reduced ideal meets with scepticism. The stories of successful participatory management in the sphere of natural resources are dismissed as 'sporadic' and 'non-replicable'. The Humboldtian dilemma persists.

#### INTRODUCTION

The study is divided into two parts. The first part explains why people should participate in natural resource management. The second part details the tradition of participatory management in natural resources management and proceeds to describe the "how of participatory management" in the present situation. The two parts

The historical/constitutional aspects of participative management contained in this study are primarily drawn upon the experience of Karnataka and Uttar Pradesh. Yet, it is our belief that the historical situation and scheme of participative management suggested by us have a wider national purport.

The study presents another argument for people's participation in natural resource management, but on a different note. Participatory management is attempted to be ideologically justified within the framework of existing property rights obtaining in respect of these resources. It is our belief that no resource managed solely by any one agent exercising property rights can be fruitful to his partner. Likewise, we also state that no one exercising property rights to a resource in any form can be denied the opportunity to have a say in its management. All the same no partner can and should exercise management functions over a resource which is disproportionate to his property rights over the resource. These axioms lead us to the question of the mode and structure of people's participation in the management of different natural resources. We have therefore touched on this aspect in the latter half of the paper.

are divided into seven sections. The first section of the first part discusses the concepts of Participative Management, Property Rights, Public and Common Natural Resources. The second section of this part deals with the origin of common natural resources and the evolution of public lands in India. The third section examines the operation of property rights in respect of the different types of public lands and common natural resources. In the fourth section, we bring out the ideology of Participative Management based on our analysis of property rights obtaining over public lands and common natural resources. The second part of this study is divided into the remaining three sections dealing respectively with the history of participative management for these resources, the decline of traditional natural resource panchayats and the consequences of the decline and finally proposed structure of participative management for different types of natural resources.

Property rights are exercised over a resource, when either or all of the following activities are carried out. (i) The right to exclude others from the use of a resource; (ii) the right to enforce exclusive use by oneself; (iii) the right to alienate the title to a resource, destroy the resource or change its legal nature either by sale or through a deed providing for a free transfer<sup>3</sup>. One of the most interesting aspects of natural resources such as public and common lands/water regimes is that

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Management is dependent on the nature of property rights exercised upon a resource by the people and the State. Hence, it would be vital to analyse the notion of property rights itself.

We take up the notion of participative management first. By this notion we mean co-joint exercise of all or few of the management functions by the owners and possessors/users of the natural resource, through relevant institutions. By 'management' we mean objectifying, planning, designing, operationalisation, maintaining and ensuring the implementation of a project, besides harvesting of its benefits<sup>2</sup>. The degree of participative management is dependent on the nature of property rights exercised upon a resource by the people and the State. Hence, it would be vital to analyse the notion of property rights itself.

We have basically employed four basic concepts on this study, all of which require to be clearly defined on account of the varied senses in which they are normally employed in similar or related studies.

### Clarifying the concepts

#### Section I

#### WHY PARTICIPATORY MANAGEMENT ?

#### PART I

all the three rights are not simultaneously exercised by the same agent. To this extent, no one agent can be deemed to be exercising unequivocal property rights over such resources. We can substantiate this view by closely examining the different forms of non-private property resources such as public natural resources and common natural resources.

Common natural resources are those used, if not necessarily owned in common by all members of a community. The common grazing lands fall in this category. These resources are characterised by open-access rights, as no form of exclusion or discrimination in any form is permitted in any manner among its multiple users. By contrast, public lands are owned by the State and do not permit open-access by the community<sup>4</sup>. Exclusion is either total or selective for the non-owner. It is an additional feature of public lands that the State exercises a positive right to the use of the soil, besides usufructs. The classic example of public land are the forests. For both common and public natural resources, there are two agents involved viz. the State and the community of people<sup>5</sup>. However, while in the case of common natural resources, the owner does not exercise the right to exclude or exclusive use, it can exercise the third function of 'alienation'. For public lands, on the contrary, the State 'excludes' and it necessarily enforces exclusive use. But in practice, this exclusion is not total as the community is permitted selective access. The third function, that of alienation, is similarly exercisable by the State for public lands.

The history of Indian village communities denotes that originally there were only two types of land, one which was cleared from what were jungles for "occupation" by cultivators and the second which existed as 'waste' surrounding the village communities. Generally 'occupied' lands were cultivated, while the 'unoccupied' wastelands were used for grazing and appropriation of fuelwood and timber. The significant difference was that in the erstwhile 'joint villages' the claim to the wastelands (in terms of ownership rights) vested in a proprietors, while in the 'severalty' villages their ownership

The genealogy of common and public natural resources

Section II

historical analysis.

To illustrate this concept we now proceed to examine the genealogy of common and public natural resource, through a historical analysis.

It may not be difficult to see that these two broad categories of non-private Property Resources are distinguishable in terms of the bundle of property rights exercised by the two agents. In the case of common natural resources, the degree of property rights exercised by the community or people is significant, while in the case of public natural resources, the degree of property rights exercised by the State is greater. But what is of basic significance is that neither of the two categories totally excludes both agents in the matter of exercise of property rights. Our argument for participative management of these resources is based on this fact.

vested in the State<sup>6</sup>. In practical effect, in both the cases, the village communities enjoyed unrestricted access to these wastes, though no individual user could lay claim to them "as his own"<sup>7</sup>. The only limitation to this situation was that the State, the proprietor, retained the right to break-up portions of these wastelands for making grants to settlers for cultivation purposes<sup>8</sup>. The village communities making use of these wastes followed sustainable management practices in certain cases, though in certain other cases, they depleted these assets<sup>9</sup>.

The situation was, however, not to continue like this. The Princely State of Mysore embarked on a programme of large scale reservation of waste lands for use by the public authority

presumably in the 18th century<sup>10</sup>. The reference is to the creation of Amrit Mahal Kavals for use by the cattle of the Royal Establishment. The Kavals (grazing lands) carved out of ecologically rich wastelands, were densely wooded with luxuriant water supply from tanks and natural streams. This would be evident from a despatch (dated 27.7.1898) of the Deputy Commissioner, Kadur District, Old Mysore State wherein the Kavals of Kadur with an area of 35,000 acres, are described as consisting of "dense inaccessible forests" with "unlimited supply of wood and fodder"<sup>11</sup>.

The major nation-wide attempt at reserving large areas of wastelands for public purposes was however to commence in the 19th century, particularly with the passing of the Indian Forest Act, 1865. The circumstances which led to reservation/

The Forest Act of 1865 'created' Government Forests, but did not distinguish or separate the property rights of the State from that of the people in respect of these enclaves<sup>13</sup>. The reason could have been two-fold viz. that the State had not acutely felt the problem of the "rights of users" interfering with the control of the State over these resources<sup>14</sup> and secondly, the State had not given serious thought to the idea of production forestry<sup>15</sup>.

"In India, for example, British rule, commenced (AD 1765/72) in Bengal and it is said that in those days as much as one half of this now populous province was covered with jungle, uncultivated and unappropriated. At first, for some years, the Government took no notice of the waste, which adjoined already occupied estates people seized on it and encroached and settled on it as they pleased... Gradually the Government realised the value of wastelands, and rules began to be made for their disposal by lease or sale to intending cultivators. But still a long time elapsed before the Government of India conceived the idea of definitely setting apart large areas of such land to form village and public or state forests"<sup>12</sup>.

constitution of wastelands into forests is brought out by Baden Powell as follows :

The Indian Forest Act of 1878 was brought in to rectify the situation that had arisen from this under-estimation. The Indian Forest Act 1878 provided for creation of three categories of forests viz., the reserved forests, the protected forests and the village forest. The reserved forests "prohibited everything that was not explicitly permitted"<sup>16</sup> for the community of users while the protected forests "permitted everything that was not expressly prohibited"<sup>17</sup>. The difference was significant as far as the people were concerned. While in the protected forests only the harmful rights (such as shifting cultivation and fellings of reserved trees) were eliminated in reserved forests along with these harmful rights, many other rights were also eliminated. This was done by defining the permissible rights of the user population. What is more, in reserved forests, accrual of new rights was also proscribed<sup>18</sup>. Such abridgement/freezing of rights was not enforced for 'protected' forests. The case of 'Village Forest's was slightly different in that its objective was primarily to cater to the basic needs of village communities<sup>19</sup>. While the Village Forests undoubtedly proscribed the harmful rights of user populations, they also share other features of reserved forests, such as restricted access of user populations by a clear definition of permissible rights and through definite rules of management. The difference between Village Forests and Reserved Forests was that the former was meant to be managed by local bodies, while the latter was to be managed by the Government<sup>20</sup>.

Given the nature of the Forest Act and the numerous restrictions it imposed on user populations, it was natural that it engendered vociferous protests from the tribals and peasantry. Guha (1985), Guha & Gadgil (1988) have graphically recounted the anti-forest act stir and rebellion by the Balgas of Madhya Pradesh and the peasants of Tehri Garhwal. They have also given a pulsating account of the famous Rampa Rebellion of 1879. By their very nature these protests were an offshoot of the economic, social and cultural vulnerability of the user populations consequent to the assertion by the state of its property rights over the former commonly used lands.

There are also reasons to believe that such assertion of property rights by the state was procedurally found wanting in some cases due to the right of the community not being recorded or amicably settled<sup>21</sup>. Thus, while the Indian Forest Act, 1927 required the Forest Settlement Officer (i) to give adequate publicity of the intention of the government to declare a selected area as reserved forests; (ii) to explain the consequences of the reservation to the people; (iii) record carefully all claims preferred to him in writing and (iv) also enquire into any rights not claimed or articulated, these procedures were not always followed, with the result that rebellions and protests occurred 'post-facto', when the user populations started feeling the pinch of exclusion<sup>22</sup>.

We now analyse the implications of the historical nature of common and public natural resources on property rights.

### Section III

#### Property rights over common and public natural resources

All the categories of common and public natural resources to be discussed here need not obtain in all parts of India. Among common natural resources discussed here are (a) Community grazing lands, (b) non-community grazing lands, (c) water regimes (such as tank-beds which mainly occur in South India), (d) the Village Forests. Among the public lands discussed here are (i) Reserved Forests, (ii) Protected Forests and (iii) The Amrit Mahal Kavals a category particularly to Karnataka. We do not state that these categories exhaust the entire list of public and common natural resources in India, though we feel that by and large they represent the typology of such resources found in the country. We begin our discussions with Common Natural Resources.

#### *Common Natural Resources*

##### (a) Community grazing lands

Community grazing lands referred to in local parlance as 'Gomal' or 'Gairan' are common and permanently open-access resources, either owned by or assigned to village communities. Where the community is the owner of these lands as well as its user, property rights are entirely exercised by it. Where the State is the owner and the community the user, the only property right exercised by the State is to divert portions of these lands for non-community use<sup>23</sup>. What is to be noted in the case of community grazing lands is that there is no attempt on the part of the State to eliminate any rights of the community to the appropriation of produce, excepting when the produce happens to

Wastelands, abssessed and unassessed, like the sivatshaks of Rajasthan, fall in this category<sup>24</sup>. These wastelands support biomass and hence are exploitable by the community. The state, as the owner, reserves the right to permit exploitation and the right to dispose grazing facility to the community. The degree of property right exercisable by the State over these lands is greater when compared to the regular grazing lands described earlier.

(b) Other grazing lands

As far as those grazing lands owned and used by the community are concerned, such dualism of property rights does not operate. The people exercise complete right to manage the resource.

meaningless.

resource and make the state's ownership rights appear the community by unsustainably using the resource destroy the purposes nullify the appropriation rights of the people, while exercising its right to divert these lands for non-community rights. This duality may not be complementary. The state can, by and the people, by virtue of the former exercising ownership lands there is dual exercise of property rights by both the State methods. The point of relevance is that for community grazing be reserved trees. The community of users had their own methods o

The case of Village Forests in respect of property rights is subtle. A village forest is conceived as a community asset, to the extent that it is designed to be managed by the village community. This does not mean that it is an open-access resource. This will be evident from the IFA, 1927, which envisages formation of Village Forests from reserved forests : And if one carefully reads section 28(2) of the IFA, 1927, which states that Village Forests shall be managed as per the rules laid down by

(d) Village forests

Local water regimes such as the minor tanks of south India are common private and public natural resources<sup>25</sup>. There are two facets of management of these water regimes - first their management as an irrigation facility, second their management as ecological regimes - Tank - beds serve not only as water-containers but also as cultivation lands, fishing ponds and grazing regimes. The latter functions of the tanks are community functions. The right to granting fishing rights, and cultivation rights are regulated by the State in the case of major tanks, and minor tanks. But grazing in tank-beds is allowed freely. However grazing fishing and cultivation are activities which endanger the utility of the tank as a water-holding regime, due to siltation etc. Therefore while in respect of tanks, the property rights are co-jointly exercised by the state, the irrigation beneficiaries and the community biomass-users, these rights are potentially conflicting.

We have already noted that reserved forests are public lands created by extinguishing, commuting and freezing rights over the erstwhile 'wastelands'. The property rights exercised by the State are dominant and explicit over these lands. This does not mean that all rights of community are exterminated since the basic principle behind reserving lands as forests was to "fix forever the respective rights of the government and private persons over the land"<sup>26</sup>. In essence the philosophy of fixing the rights of the Government was not to disable community rights, than prevent the unsustainable exercise of community rights particularly from the colonial forestry view point. Reserved forests have great degree of social accountability than is normally presumed and this is underlined by none other than one

(a) The reserved forests

(ii) The public lands

the community. not provide for dual exercise of rights to use by the State and by the community. Despite these limitations, Village Forests do "settlement of rights" in respect of these resources be vitiated village forest as an open-access grazing land - nor can the resource. Thus a village community has no right to declare a harvest and not the property right of altering the nature of the respect of this resource is the right to maintain, replenish and resolves once it is realised that, what the state relinquishes in its property rights to the village community. The paradox really those natural resources over which the state has ceded all the state, one entertains doubts whether Village Forests are

The Kavals were thus public lands over which both the state and the people exercised appropriation rights. However the state as the owner exercised the right to grant these lands for non-

rains<sup>28</sup>.

draught bullocks which solely depended upon the Kavals during the water sources occurring within the Kavals (e) the right to graze manufacture of agricultural implements (d) the right of way to royal cattle (c) right to collect wood and small timber for right to grazing, after completion of the same process by the communities in its surrounds (a) right to collect firewood (b) These Kavals provided for the following rights to village

(b) The Amrit Mahal Kavals

advantage of the proprietor. British industrial interests has always tilted the balance to the remove the social nature of the resource, though the dictates of The assertion by the state of its property rights does not

"A forest may be said to fulfill its highest function when it produces in a permanent fashion, the greatest possible quantity of that material which is most useful to the general public and at the same time yields the best possible return to the proprietor"<sup>27</sup>.

of the most distinguished Inspector Generals of Forests, Bertold Ribbentrop, in the following words,

We have seen that all categories of non-private property resources have property rights co-jointly exercised by the owner (generally the State) and the possessors (generally the people).

The ideology of peoples participation

Section IV

community.

greater degree of property rights for the people or the non-prohibited rights for the community, it provides for a Forests do not provide for settlement of rights or accrual of protection/exploitation rights of the state. Since the protected rights of the community run concurrently with the harmful rights of individuals or communities. The appropriation rights by the community. They do not abridge or affect non- This category of public lands provides for appropriation

(c) The Protected Forests

established defacto control over land-use of over these kavals. by declaring Amrit Mahal Kavals as Protected Forests, has however removal of other forest produce. The Karnataka Forest Act, 1964 trees, felling and removal of timber of selected trees and The Forest Department was left with the control over standing well as the cattle of the village communities was left untouched. control, the right to grazing cattle of Amrut Mahal cattle as Forest Regulation XI of 1900<sup>29</sup>. But inspite of the dual through a new set of rules framed under section 35 of the Mysore jointly brought under the Amrut mahal and Forest Departments, designated purposes. In 1928, the control of the Kavals was

To make meaningful the exercise of property rights, it is necessary that both play their roles in the management of the resources. The actual situation for common natural resources such as common grazing lands is that they are either mismanaged or managed through non-formal institutions. In the case of public lands such as Reserved and the Protected Forests, the reality is that only one of the partners exercising property rights, i.e., the State, manages these resources. Whatever be the merits of such management of these lands by the State the basic truth is that these resources need to be managed with people's participation, since people also exercise property rights over them. Just as it is essential to ensure that the appropriation rights of the people do not interfere with the production-concerns of the State, it is equally important to see that these rights and concerns of the State do not interfere with that of the community<sup>30</sup>. As Ribbentrop remarks

"Thus a Reserved Forest has not necessarily the object, as is frequently believed, of producing large timber for export or public works, but more often, that of supplying the local demands in small timber, fuel, grass or any other forest produce"<sup>31</sup>

Today in States like Karnataka, there are grassroot environmental movements which question the desirability of using forest lands for supplying pulp wood to industries<sup>32</sup>. These movements have erupted in the main, due to the insensitivity of

However the degree of people's participation may vary for public lands and common natural resources, and would depend upon the incidence of property rights exercised by them over these resources. In the case of natural resources, it may be desirable for people to design, implement, manage, maintain and harvest the resources with the support of the State, since they exercise dominant rights. In the case of public lands such as Reserved Forests, the role of the State in formulation, implementation, maintenance and harvest can be more significant given the

The above provision makes it clear that Reserved Forests are public lands that can be considered for management by people. It naturally follows that in the case of other public lands viz., protected forests and Amrit Mahal Kavals, where the state has not exercised dominant property rights, people's participation is incumbent.

#### called Village Forests"

"The State Government may assign to any village community the rights of government to or over any land which has been constituted as reserved forest, and may cancel such assignment. All forests so assigned shall be

Reserved Forests to the demands of the local poor for small timber, fodder and fuelwood i.e. the appropriation rights of the people. The social accountability of Reserved Forests in the ultimate analysis needs no better substantiation than the Indian Forest Act, 1927 itself, Section 28 of which runs as follows :

dominant property rights exercised by the State in respect of these lands. Nevertheless, as already mentioned the people too need to play a role on management of these resources, since they too exercise property rights. Their role could be to ensure that no scheme/project would be devised for these public lands, which would adversely affect their aspirations/needs reflected in their appropriation rights over these lands.

The notion of 'segmentary state' advanced by Burton Stein to explain the peasant society of Medieval South India largely testifies to local management of natural resources by peasant communities<sup>33</sup>, Elizabeth Whitcombe writing of the history of United Provinces during the British rule, mentions how despite British attempts to centralise administration "it was established as a central tenet of Government Revenue Policy that the administration should interfere as little as possible with the affairs of local proprietors and the lambarbars in the Mahal villages<sup>34</sup>". The lambarbars of the North or the 'nadu' chiefs of the south were not elected representative of the people. Yet they exercised tremendous social, economic and ideological control over their communities and it was this multiple struggle hold that ensured management of natural resources in their specific 'traditional' forms. These management practices were not legally institutionalised by the State, though it must be stated that the state took cognisance of some of the sound management practices and incorporated them in the form of normative guidelines in village manuals etc. In the mid-19th century the British Government woke up to the need for introducing local self-government by institutionalising and strengthening panchayats and municipalities. These moves were as the result of belated recognition of the 'power' of 'nadus chiefs' or the 'lambarbars'

*AND COMMON NATURAL RESOURCES*

*THE HISTORY OF PARTICIPATIVE MANAGEMENT OF PUBLIC LANDS*

PART II

The chairman of the Tank Panchayat was the village headman himself and leaving aside the 'Shanbog' or Village Accountant the

wherever necessary".

Panchayat regulations to constitute Panchayats Government have taken power under the tanks shall be satisfactorily carried out, restoration, repairs and maintenance of minor regard to maintenance of major tanks and the "to provide that obligations of ryots in

preamble of the act read as follows :

specific act was titled "The Tank Panchayat Act, 1911". The Resource Panchayat was created by this state in 1911 and the the 19th century i.e. the State of Mysore. The First Natural Native State which had enjoyed a measure of British protection in Natural Resource Panchayats. The lead for this was taken by a One positive result of such thinking was the establishment of was not always fruitful. This thinking was not pervasive, though. progressive realisation that 'colonisation' of natural resources same period. However by the beginning of 20th century there was a lands, by the State for forestry or other purposes during the resources through reservation of community and non-community self-government went hand in hand with centralisation of natural This would be evident from the fact that the movement for local importance in this scheme of devolution of power to local bodies. communities. The 'natural resource dimension' was never given due in the political, economic and social realms of Indian village

The Tank Panchayat System was not a complete success in its coverage. For instance the report on administration of the Village Panchayats, 1939-40, of the Government of Mysore recorded that though there were 11,961 Village Panchayats in existence in the State, only 10 Tank Panchayats existed. Clearly the extensive nature of tank irrigation in old Mysore State, could have created more than 10 Panchayats. We are not aware of any evaluation of the actual functioning of Tank Panchayats in old Mysore. But we can certainly visualise certain problems arising out of its structure. As we have seen, the composition of these Panchayats was heavily in favour of the irrigation beneficiaries, whose outlook as we have noted earlier, varies sharply from the rest of

2/3rds of wetlands in the command area. get the concurrence of 2/3rds of the ryots, holding atleast irrigation in the communal area, however, the Panchayat had to and repairs. In the matter of determination of the area of tanks and administer the Tank Maintenance Fund for maintenance customary obligations of ryots for maintenance and upkeep of occurring on tank beds. The Panchayat was also required to enforce fishing, grazing, cultivating and harvesting of tree produce wide variety of ancillary functions such as granting rights to distributing irrigation water, the Panchayat was entrusted with a Commissioner of the district. Apart from the responsibility of ranged from 3 to 7 depending upon the discretion of the Deputy represented the dryland ryots. The number of elected members represented the irrigation farmers while the remaining members, rest were elected members. Three-fourth of the elected members,

2. Regulating or stopping of grazing by livestock in Village wood products,

1. Permission for extraction and transportation of wood and functions :

Deputy Commissioner. The panchayat exercised the following scrutinised annually by the Amildar of the taluk or even the Panchayat maintained accounts in the prescribed manner which was discretion of the Deputy Commissioner of the district - the could be either elected (once in three years) or appointed at the annually. The number of other members ranged from 3 to 7 who Panchayat was to be headed by a Chairman who was to be elected the forest resources at their disposal". Each Village Forest greater interest in a more economical and well regulated use in their domestic and agricultural needs and to induce them to take draw their supply of fuel, timber and other forest produce for and improvement of lands from which they have been accustomed to was to "secure the co-operation of the ryots in the protection brought into effect in 1915<sup>35</sup>. The principal object of the act natural resources was the Mysore Village Forest Panchayats The second form of Panchayat for exclusive management of

form of cattle-biomass and agricultural crops. simultaneous development of the tank as a resource yielder in the focus' instead of an "ecological regime" focus aimed at benefited from these Panchayats with its exclusive, irrigation larger community of non-irrigation beneficiaries could have resources of the tank. It is difficult to understand, how the the community who have no property rights over the water

Forests and imposition of grazing fee, if any

3. Auctioning of jungle wood, timber and wood products except those not belonging to the category of reserved trees such as sandal, teak, rosewood etc.
4. Maintain and safeguard forest area
5. Executing work according to the working plan of the Forest Department and divide the forest into working blocks
6. Planting of fuelwood, fodder tree species as well as commercial trees such as teak
7. Develop grazing lands and undertake planting of fast growing fodder species
8. Creation of Village Forest Fund and deposit in the name of Panchayats in government saving bank, proceeds from auctions. The Fund so created was only to be employed for maintenance, protection and developing of the Village Forests.

The second area in India where exclusive natural resource Panchayats were created was in Kumaon in the United Provinces. The Kumaon Van Panchayat Rules were issued in 1931 under the scheduled district act of 1874 to regulate management of Village Forests. This was a sequel to the 1929 popular peasant movement in the area for the creation of such Panchayats<sup>36</sup>. Between 1931 to 1955, 1301 Forest Panchayats were organised covering an area of 1,91,385 acres. A recent study of these Panchayats by Viswa Ballabh and Katar Singh (1987)<sup>37</sup> in Kumaon brought out its following compositional features. The Van Panchayat Committee has five to nine members who are elected once in five years. The elected members draw up the bye-laws for utilisation of forest

The shortcomings of the Village Forest Panchayats in the old Mysore State have not been assessed, though a number of reports exist regarding the poor functioning of Village Forests in general. As per the report of Forest Administration in Mysore State 1940-41, 1.53 sq miles of Village Forests were de-reserved by the State as pasture grounds<sup>39</sup>. Other defects mentioned with regard to Village Forests in old Mysore State were lack of control over removal of forest produce, non-prevention of grazing, disinterest in raising plantations or protecting them and non-following of working plan prescriptions<sup>40</sup>. But all these are indictments of Village forests and not of Village Forest Panchayats. Evidence of the working of Van Panchayats in U.P.

The District Magistrate at the district level<sup>38</sup>. Inspector at the Tehsil level and the Van Panchayat Officer and Sarpanch who in turn is accountable to the Van Panchayat Van Panchayat Committee is at the village level supervised by the also conducts auction of fallen trees and other by-products. The plan prescriptions of the Forest Department. The Van Panchayat through a compartmentalised working pattern as per the working forest revenues and regulation of tree felling and grazing

1. Protecting forests from indiscriminate felling and fires
2. Protection from encroachments
3. Demarcation and fixation of boundaries, utilisation of

The Van Panchayats exercise the function of

resources and its development. These bye-laws so prepared are forwarded to the District Magistrate who in turn submits it to the Commissioner for approval.

indicate that Forest Panchayats have not been successful in controlling the extent of lopping of trees. While this indicates a failure on the part of Van Panchayats in regulating the use of Village Forests, it is also the finding of the study that the condition of vegetative cover of Panchayat Forests was still better than that of the adjoining Reserved Forests. Yet another criticism levelled against Village Forest Panchayats in particular is their reluctance in following working plan prescriptions of the Forest Department. But this can be due to the fact that village forest working plans are not prepared in consultation with people and in accordance with peoples' needs. In any case, it is doubtful whether working plans are systematically prepared for village forests as for Reserved Forests. But on the whole, it can be stated that even natural resource panchayats cannot be immune to the problems normally plaguing the general Panchayats.

What happened to Natural Resource Panchayats ?

The earlier policy of establishing special Panchayats for managing natural resources was not continued in the post-independent period in all cases. While the hill districts of Uttar Pradesh do continue to have the system of Van Panchayats even today, in the State of Mysore, with the passing of the "Mysore Village Panchayats and Local Boards Act 1959", the task of locally managing the Village Forests and grazing grounds was declared under Section 42 of the Act, as one among the 19 obligatory functions to be discharged by the Village Panchayat.

the impact of the General Panchayats in India in the sustainable

forestry, soil conservation and decentralized farms. Clearly only in relation to the centrally sponsored schemes of social forestry, it is similar progress in the forestry sector, it is schemes in its brief existence<sup>41</sup>. Though it also mentions of public health and primary education, medicine and housing Zilla Parishads and Mandal Panchayats of Karnataka in the spheres Committee (1989) mentions of the great progress achieved by the report of the Zilla Parishad and Mandal Panchayat Evaluation at the local level with people's participation. For instance the been the neglect of the dimension of Natural Resource Management existence/decline of the special Natural Resource Panchayats has One of the important consequences of the non-

#### *THE CONSEQUENCES OF THE TEMPORARY SITUATION*

##### Section II

exclusive Village Forest and Tank Panchayats. is perverse for states like Karnataka having a tradition of historically no special Natural Resource Panchayats existed, it omission cannot be considered 'abnormal' in states where dimension has been lost even in this radical Act. While such an power to the district and village levels. The natural resource which by all accounts is a further significant step to force down Samitis, Mandal Panchayat and Vyaya Panchayats Act of 1983", despite the "The Karnataka Zilla Parishads, Taluk Panchayat Panchayats was thereby lost. The situation has not changed separate, distinguishable identity of Natural Resource Management The same was the case with management of ponds and tanks. The

management of natural resources is not remarkable. The consequence of this situation has been the eruption of grassroot eco-development efforts in places like Chamoli (U.P.), or Sukhomarji in Haryana<sup>42</sup> which essentially have an 'non-panchayat' nature. These grassroot eco-efforts have further lowered the credibility of Panchayats as 'local development agencies'. They have also cast doubts on the ability of general Panchayats in the management of natural resources at the local level. The problem for the Government as the funding agency is that it has to fund not only the institutionalised local bodies but also the informal non-government organisations for the tasks of 'ecological restoration'. The main reason for this chasm between the Panchayats and the non-governmental voluntary movements in the field of natural resource management could be that the latter have reinforced and improved upon the traditional endogenous structure of resource management, whereas the former have made a break from it, in their attempt to implement sectoral programmes of central / state governments. In other words the former has been turned into a "peoples' elected body" at the local level to execute centralised schemes while the latter is a non-elective body at the local levels which frames local strategies of natural resource management with financial aid from the central/state government.

### Section III

#### THE ALTERNATIVE STRUCTURE

There is clearly a need to combine both the local trends for natural resource management in rural areas where they obtain. The

At Appendix I, we bring out the horizontal dimensions of local natural resource management. It would be clear from diagrams I to V, that it is rarely that all the three agents, viz the Panchayats, the NGOs and the people contribute, in a coordinated manner, in managing common natural resources. In some situations NGOs do not exist. In certain other situations, the people themselves manage the common resources without any support from the Panchayats. In constituting or reviving Natural Resource Panchayats there is the need to associate all the agents and thereby broaden their composition as depicted at diagram VI. Where NGOs do not exist, the other two agents may have to play an

Panchayats have to be situated.

the second is the vertical length of the chain in which these first is the horizontal width of Natural Resource Panchayats and are a host of situational problems on has to reckon with. There constituting or reviving such natural resource panchayats there would have to revived or established as the case may be. But in combination would mean the special natural resource panchayat governance of natural resources. In practical terms the principles of aggregation and disaggregation in the self-on natural resource management (3) The co-existence of the existence of traditional and new methods of local self-government management do not partake in the electoral process (2) The co-NGO's and other 'traditional' practitioners' of natural resource local self-government of natural resources, given the fact that, (1) The co-existence of elective and non-elective principles on theoretical implication of this combination could be three-fold

active role in Panchayats. Where both people and Panchayats neglect management of common natural resources, and no NGO is active, the Natural Resource Panchayat still needs to be constituted if necessary, under the bureaucratic order, for implementation of sectoral programmes till such time they are capable of being run on their own, through their locally devised programmes. This is what we meant by stating that the principles of aggregation and disaggregation shall operate in a combined manner, for Natural Resource Panchayats.

At Appendix II, are bring out the alternative vertical linkages in the sphere of common natural resource management. The direct, linear channels of vertical organisation characteristic of 'Traditional Natural Resource Panchayats' of old Mysore State and U.P. Hills may be seen in diagram I and II. In U.P. hills the same vertical linkages continue to operate, though in Karnataka as we have mentioned already the Village Forest / Tank Panchayats have ceased to exist and besides the regular panchayat is presently a three-tier structure<sup>43</sup>, without any nexus with the Revenue Department which as we had shown in Part I exercises ownership rights over most of the common resources<sup>44</sup>. This change in Karnataka has been brought about by the very philosophy of "The Zilla Parishad, Tank Panchayat Samiti, Mandal Panchayat and Nyaya Panchayat Act" which aims at separating land revenue and law and order administration from development administration. While the Deputy Commissioner of the District and the Assistant Commissioner of Sub - Divisions attend to the former, the Zilla Parishad has a Chief Secretary drawn from the bureaucracy who

looks after all the developmental functions. The Evaluation Committee Report on the functioning of the Zilla and Mandal Panchayats in Karnataka speaks of the reduced role of the Deputy Commissioner of the District on developmental functions consequent to the Act<sup>45</sup>. Indeed the report goes ahead to recommend that the Assistant Commissioners of Sub-Divisions be entrusted with specific development activities under the Zilla Parishads to effect horizontal co-ordination at the Sub-Divisional level and also to ensure that officers of the different Departments extend necessary facilities and co-operation to Mandal Panchayats<sup>46</sup>. One cannot think of a more specific development activity for execution by Assistant Commissioners of Sub-divisions than Natural Resource Panchayats, which by nature have complicated management issues requiring the exclusive attention of responsible officers. Associating Assistant Commissioners or Sub-Divisional Magistrates would imply a non-linear system of vertical linkages for natural resource Panchayats as depicted at Diagram IV, in Appendix II. While the natural resource Panchayats would be represented by the Mandal Panchayat members who are otherwise placed below the Zilla Parishads, in the matter of natural resource management, the Natural Resource Panchayat (whether it be Village Forest Panchayat or Tank Panchayat) shall interact with Zilla Parishad through the Assistant Commissioners who shall also simultaneously secure orders / guidance from the Deputy Commissioners on matters such as 'encroachments'. The decisions of the Zilla Parishads on the proposals of the Natural Resource Panchayat shall then

trickle down the chain to the Natural Resource Panchayats. This arrangement ensures the incorporation of the Revenue Department in the management of common natural resources, a fact which is utmost importance, given their ownership over these resources. The U.P. model may not perhaps require much changes except that the Van Panchayats broaden their composition by drawing upon members from NGO groups and from the regular Panchayats. (Diagram V). The chain of vertical linkages will change for Reserved Forests and other public lands (for both models) in that the relevant Department in the hierarchy would be the Forest Department or the owner Department as the case may be (Diagram VI and VII).

We now take up specific natural resource Panchayats for a detailed consideration.

#### The Village Forest / Gomati Panchayat

Where newly constituted, the Village Forest Panchayats shall be headed by a Chairman, who is either the 'Upapradhan' of the Mandal Panchayat or one of the members. (This is suggested since in practice the Pradhan of the Mandal Panchayat is burdened with other duties). Similarly, one member each of the (Mandal) Panchayat should be incorporated in the Village Forest Panchayat to represent women and the SC/ST communities respectively. These Panchayat should have two official members viz the Patwari or Village Accountant and the Range Forest Officer. The remaining members should be selected on the basis of the consensus at Gram Sabha meetings. Of this at least one member should represent the landless category; while the remaining can be drawn from the NGOs

(f) Ensuring that the design of Working Plans for Village Forests

Commissioner.

(e) Reporting thefts of timber and other wood products to the police authorities and obtaining the help from the Assistant

help of Assistant Commissioners of the Sale-Division.

(d) Prevention of encroachments, mining, quarrying on the forest/grazing lands and eviction of quarries/encroaches with the

be deposited in a Village Forest Fund.

(c) Auctioning of junglewood, fallen/naturally decayed timber other than that of reserved trees and collection of proceeds to

grazing fee

(b) Enforcing traditional grazing cycles and imposition of

and other tree produce.

(a) Granting permission for extraction/transportation of wood

produce. The functions could be

maintaining the existing resources besides distributing the

cover; objectifying, designing, operationalising new schemes,

The main functions of these Panchayats shall be such as to

Panchayat Members are members in this body.

reference to the village population since the elected Mandal

10. It will be superfluous to determine this number with

total members of the Village Forest Panchayats shall not exceed

capable of contributing to the management of the forests<sup>47</sup>. The

and other classes of farmers, whom the villagers perceive as

aggregated area plans for the district.

(m) Building up an inventory of local resources of land, water for the area of jurisdiction with the technical/administrative assistance of the Forest Department and other technical institutes in the State. This is to enable formulation of

the Assistant Commissioner for verification/scrutiny.

(l) Administration of Village Forests / Gomal / Panchayat Fund and submission of annual accounts to the Zilla Parishads through

Fuelwood or small timber.

(k) Distribution / Sale of harvested produce such as fodder,

the Forest Conservation Act, 1980.

(j) Planting of fuelwood fodder and other timber / tree species of their choice offer obtaining concurrence of the Assistant Commissioner regarding its suitability from the point of view of

development schemes of the government and NGOs.

(i) Executing / or help in executing village forest / gomal

technical guidance of the Forest Department.

(h) Executing work relating to re-seeding of grasslands with the

Working Plan.

(g) Executing work according to guidelines laid down in the

in the formulation of Working Plans by the Forest Department.

is need-based, by active association with the Forest Department

As we had noted at Part I, there are three categories of agents who exercise property rights over a tank. They are the beneficiaries of irrigation, the rest of the community and the State. A Tank Panchayat should be represented perforce by these three agents. While basically the composition of the Panchayat

#### The Tank Panchayats

It will be seen from the above functions that the scheme favours reliance on vertical linkages for at least 5 functions. Yet it also promises relative autonomy to the Village Forest Panchayats in the spheres of harvesting, auction of produce. The point, however is that a number of facilitating conditions should be there, for carrying out some of the above functions. One is the earmarking of a fixed but adequate proportion of Zilla/Mandal Panchayat Funds to the Natural Resource Panchayats to give them adequate financial security for proper maintenance and execution of afforestation programmes. Secondly the cost of employing technical graduates from Agricultural / Forestry Institutes for technical guidance, should be met by the Government. Thirdly these Panchayats should be in a position to compensate livestock holders who are deprived of fodder due to closure of the grazing lands for regeneration. Fourthly, Working Plan preparation and approval of the same should be decentralised to the level of the Working Plan Officer at the Divisional level who shall be bound by the demands made by the Panchayats provided that these are not inconsistent with the guidelines of the Central Government with regard to Working Plans formulation or the requirements of the Forest Conservation Act.

within the purview of P.W.D.

Tanks intends to cover only minor village tanks which do not come  
It may however be noted that our scheme of Panchayats for

other biomass standing on bunds / foreshores shall apply.  
Parishads. The usual restrictions on harvesting of trees and  
accounts will be done by the Assistant Commissioner and the Zilla  
as that of a Village Forest Panchayat. The work of scrutiny of  
The vertical linkages of a Tank Panchayat shall be the same

improvements, for the benefit of the users.  
deposited in the Tank Fund, for deployment for future  
surplus) in the open market, the proceeds of which shall be  
the user / maintaining groups and also disposed of (in case of  
produce from the tank beds can be distributed by the panchayat to  
assigned to the Traditional Tank Panchayats on Mysore State. The  
The functions of the Tank Panchayat could be the same as

labourer. The maximum members in a Tank Panchayat can thus be 12.  
positions could go to an NGO representative and a landless  
irrigating farmers and dryland farmers. The remaining two  
members who can be six in numbers two each can be drawn from the  
associated with the management of irrigation. If the remaining  
'Neerganti' in the Tank Panchayat, if he is still actively  
associate the traditional distributor of water i.e. the  
members (the RFO and the Patwari), it would be necessary to  
Chairman and representatives of SC/ST and women and the official  
can be the same as Village Forest Panchayat with regard to the

These tasks can be carried out by a Standing Joint Committee chaired by the Adhyaksha of the Zilla Parishad, one member from the Taluk Panchayat Samiti, the Territorial Divisional Forest Officer, and Chairman of Village Forest / Gomal Panchayats or Pradhans of Mandal Panchayats and representatives of NGO groups being the other members. The demands voiced in the committee meetings shall be placed by the DFO (who shall be the member-secretary of the committee) to the Conservator of Forests of the relevant circle. While the responsibility of distribution of produce earmarked by the Forest Department to the community shall be the responsibility of the Zilla Parishads, the Forest Department shall have the discretion to allot additional produce to those Mandal Panchayats which have contributed to the protection / maintenance of forests. The case of public lands such as Protected Forests and Amrut Mahal Kavals can be analogously organised in co-ordination with the relevant

plantations.

No separate Natural Resource Panchayat is proposed for Reserved Forests, since the role of local institutions in managing this resource is limited, given the nature of property rights. People's participation is suggested for Reserved Forests to the extent of (1) voicing their demands for forest produce such as fodder, fuelwood and small timber and ensuring that these needs are met by the Forest Department. (2) helping the protection of Reserved Forests from fires, grazing and illicit cutting of trees. (3) mobilise labour for maintenance of

Reserved Forests

The scheme of Natural Resource Panchayats suggested above is village - specific. Logically the suggestion envisages strengthening of the role of Gram Sabhas in the matter of formulation and implementation of eco-development programme. These programmes need to be formulated on the basis of the needs of the different social groups elicited through specific village-level surveys and discussed at the Gram Sabha meetings. The proposals of the Gram Sabhas should be scrutinised and approved by the Zilla Parishad only from the angle of their desirability from the point of view of national legislations such as the

the Tahsildar of the relevant taluk.

Thus the role of the Assistant Commissioner would be taken up by a change of official presence in the Resource Management Scheme. Panchayat Samiti and not the Zilla Parishad. This would also mean outlined in the preceding section, shall be exercised by the body). Naturally for these states, the functions of the apex body Panchayat Raj system is the Panchayat Samiti (a taluk level and Tripura, Zilla Parishads do not exist<sup>47</sup>. The Apex Body of the system. Indeed in states such as Assam, Haryana, Manipur, Sikkim sixth Five Year Plan, there were four states which had a two-tier exists. It may be pertinent to point out that at the end of the where a three-tier or a single tier system of Panchayat Raj Panchayat System. This may be suited to basically to States / UTS We have attempted to propose a viable Natural Resource

to the people over these public lands.

of the Joint Committee could be enhanced given the greater rights Department viz the Department of Animal Husbandry. The functions

To conclude we have made a argument for people's participation in resource management, based on the nature of property rights obtaining over common and public natural resources. Again it was on this criterion of property rights that we defined the extent and the structure of people participation for different types of non-private property natural resources. We aptly end this study by drawing attention to a valid observation contained in the "Report on the Measures for Democratic Decentralisation at the District and lower levels" submitted to the Government of Kerala in 1988. The observation, albeit a long one, runs as follows, "In the presumed interests of unity of command, professional attention, operational efficiency and achievement of sectoral targets, the Departmental Agencies, Boards, Authorities and Corporations in each sector... created their own vertical organisation. Each of these organisations has hundreds and thousands of functionaries, who have a stake in its further growth. They are jealous of their domain and do everything in their power to ensure that their own organisations grow from strength to strength. The decision makers and those in charge of the administration and management of these organisations find it convenient to yield to this process since their powers also grow instead of being shared with others. The

Forest (Conservation) Act. This suggested course of action would be consistent with the Approach Paper to the Right Five Year Plan and the proposal of the present Central Government to give Gram Sabhas a Constitutional status as the basic unit of the Panchayat Raj System.

two thus act as mutually reinforcing forces of centralisation"48. Any argument for people's participation in natural resource management is unfortunately pitted against this inexorable logic of centralisation.

(This paper owes its origin and present shape to the inspiration and critical suggestions of Prof. Madhav Gadgil. The author is grateful to Shri P.S. Appu, former Director, Lal Bahadur Shastri Academy for enlightening him on the new experiment of grassroot democracy in Karnataka. The brief, but useful interaction on the subject matter with Shri V. Ramachandran, former Chief Secretary, Kerala is likewise thankfully acknowledged. The author is entirely responsible for the limitations of the study. The views expressed here are personal and do not purport to be that of his organisation)

FOOTNOTES

1. See Noam Chomsky's 'Introduction' in Daniel Guerin (1970, p.xi)
2. The FAO has defined peoples' participation as the process in the design, implementation and evaluation of the participatory action. The extent of peoples' share in the design, implementation and evaluation of participatory action will of course depend on the nature of property rights exercised by them over the resource. Our definition is a slightly modified version of the FAO definition.
3. The elements of property rights as developed by Scott and Johnson (1985).
4. See Fischer and Krutilla in Haefaele (ed.) (1974, p.38-41) for a clear distinction between public lands and common property resources. The term 'open-access' should be taken to mean not only common access but also 'direct-access'.
5. There are of course public lands, such as Defence lands, which are zero-access resources, since they are not open to the people for any use.
6. The different land system in British India notwithstanding, it is possible to broadly categorise the erstwhile villages in British India into two types viz., 'Joint Villages' held by a proprietor or a group of proprietors and 'several' villages where ownership of land is 'several' and 'individualistic'. (Baden Powell, 1982, Chap.IV, p.10). This two-fold categorisation was developed by Baden Powell on the basis of nature of ownership rights exercised over uncultivated or unoccupied lands and not for that of cultivated or occupied lands. 'Wastelands' in the British Revenue Administration parlance referred to 'Unoccupied lands' and not ecologically degraded or uncultivated lands.
7. Ibid (p.10).
8. Ibid (p.129).
9. In many cases the policy of setting apart grazing grounds to village cattle was necessitated by the need to protect privately cultivated lands from being grazed. (Madkarni, 1989, citing Wade).
10. We have to surmise the period since we do not know the exact year when the reservation of Amrit Mahal Kavals occurred in the Old Mysore State. The Amrit Mahal Department however dates back to the 18th century.
11. As mentioned in letter No. 39 dated 27.7.1898 from FEC Carr, Deputy Commissioner, Kadur District to the Chief Commissioner, Mysore.
12. Baden Powell (1893) as cited by W.A. Gordon (1955, p322).
13. See Gordon (1955, p. 323).
14. Ibid.

15. The reference is to the attempt of the British forestry administration in India to raise man-made plantations in natural forest area - Guha and Gadgil (1988, p.9) refer to the successful attempts of the British forest administration in transforming the mixed coniferous stands broad-leaved forests of the Himalayas into the pure coniferous stands and conversion of the rich evergreen forests of Western Ghats into single species teak plantations.
16. See Indian Forest Act, 1978 and also Gordon op.cit. The ostensible idea was to create reserves in respect of lands to be permanently managed as forests in the long term interests of the country. These 'reserves' were to qualify for 'first' degree protection, which seeks to prohibit everything that is not expressly permitted.
17. This accords with the maxim of 'second degree protection' for those unoccupied free lands, whose ultimate use may be liable to influence from the trends of population etc. The accent of the second degree protection measures through the declaration of these areas as 'protected forests' was to afford a rudimentary degree of protection from such 'wasteful' practices such as shifting of cultivation apart from protecting the valuable 'reserved' trees in these forests. See Gordon (1955) for a good discussion.
18. The IFA 1927 also retains this provision.
19. Unlike in this case of Reserved forests and protected forests, no principle of protection is mentioned for village forests in the IFA of 1878 and 1927.
20. J. Shetty (1980, p. 152-153).
21. There are reasons to suppose so. For instance, the Revised Working Plan for High Forests Block I to IX and XX, Karwar Northern Division (1956), Bombay State, mentions how such easement rights (such as way to temples, water reserves and sources etc of nearby villages) were not recorded by the Settlement Officer in the settlement operations conducted in 1875-76 in these areas and how even after the passage of the 1878 Forest Act the same lands were automatically declared as 'Reserved' on the basis of the old settlement without recourse to any fresh settlement process as per procedure laid down in the IFA 1878. Obviously procedures of forest settlement could not have been followed in its entirety. This explains how in a span of 30 years i.e. from 1870 to 1900, 81,124 sq.miles of area was declared as Reserved Forests in Indian and Burma (See Nakkarni (1989a, p.43)).

22. Another notable case is that of Cyprus which adopted a forest settlement procedure resembling that of India. The first settlement operations conducted to determine and declare 'reserved' forest areas, proved to be so unsatisfactory that it had to be reviewed in 1930, in the wake of protests and resistance to the new laws by the affected population. The reason for the review was that potential claimants had not exercised their claims for want of knowledge of the implications of "reservation" (see Gordon p.331). Even worse is the situation, described by Saxena in Chambers et al (1989, p.148) where long after reservation, people are still far from fully informed about their rights over forests. The observation is based on a study on 767 tribes interviewed in a tribal district of India.
23. Though the Deputy Commissioner of the District is empowered to grant gomal grazing lands for cultivation, he has to ascertain the sufficiency of gomal, taking into account the livestock population of the villages concerned in relation the standard carrying capacity of these lands.
24. Rita Brar (1988) distinguishes two forms of grazing lands in Rajasthan. The regular grazing grounds called 'Charagah' and the other common lands (the siwachaks) were both used for grazing. A similar distinction existed in Karnataka between the regular grazing grounds (gomal) and other wastelands. Though both were commonly used the first was truly open-access, the second being subjected to some restrictions in the matter of grant of grazing rights.
25. See Nirmal Sengupta (1985, p.1935) for instances of continued maintenance of tanks in South India by cultivators despite the weakening of community organisations during the colonial period.
26. See B. Ribbentrop (1989, p.1 & 8).
27. Ibid.
28. Letter of D.C. Kadur op.cit.
29. Reference is to Notification No. G 3185-Ft-261-26-8 dated 6.9.1928 of the Govt. of His Highness, the Maharaja of Mysore.
30. The implications of the separation of production rights from appropriation / consumption rights in respect of reserved forests can be appreciated if one goes by the following remark, 'Production mediates consumption' - it creates the latter's material; without it, consumption would lack an object. Production thus produces the object of consumption, the manner of consumption and the motive of consumption". (Marx, 1973, p.90-93).
31. Ribbentrop op.cit (p.108).
32. Reference is to the grassroot environmental movement led by Samaj Parivarthana Samudaya in the State of Karnataka.

33. See Burton Stein (1980). Stein stresses on the notion of segmentary State to characterise the functioning of the Cholan Empire. He denies the existence of any bureaucracy and state administration in the Chola period. Stein's view on segmentary State is disputed by Karashima (1985). However, Karashima agrees with Stein about the role of the 'Nadu' as an 'ecological' unit in Cholan Administration.
34. Elizabeth Whitcombe (1980, p.242).
35. The Village Forest Panchayat Rules were brought in to force in 5.1.1915.
36. Information contained in the letter dated 19.2.55, addressed by the Govt. of India, Ministry of Food and Agriculture.
37. Vishwa Ballabh and Kartar Singh (1987, p.5-7).
38. Ibid (p.2).
39. Report of Forest Administration in Mysore State, 1940-41 (p.2).
40. This is mentioned by the CCF, Mysore in his letter to Secretary to the Government of His Highness of the Maharaja of Mysore, dated 6.9.1937.
41. See Ballabh and Kartar Singh op.cit (p.9).
42. These are just two outstanding examples. For further details see C.P. Bhatt (1990) and Chopra et.al (1990). Another example of management of Common Property Resources by Non-Panchayat organisations is given by Wade (1989) with reference to villages in Kurnool district of Andhra Pradesh.
43. The present 3 - tier system is a sequel to the 1983 Karnataka Act.
44. Evaluation Committee Report op.cit (Chapter IV, p. 54).
45. Ibid (p.70-71).
46. Shah (1990, p.21) mentions how encroachments are not preventable by Panchayats due to local, social and political reasons.

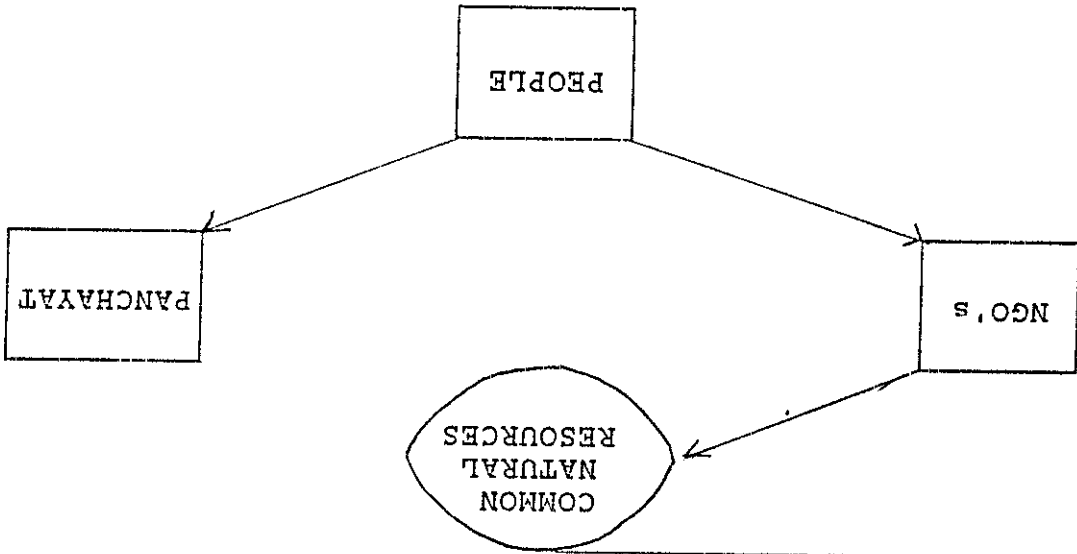
47. As an example, we cite, the instance of a village in Bangalore district. The main architect of preparation of local medicines for livestock in this village, is a landowning farmer, by name Shri K. Venkataswamappa. All the local medicines are prepared by him from the herbs naturally growing in the Gomal lands. The same is distributed to the needy livestock owners at a marginal cost. Today, Venkataswamappa laments at the loss of natural herbs from the Gomals. He says that, the supply of local medicines will cease if the natural herbage is lost. The people who rely on Venkataswamappa for treating their livestock for viral and non-viral infections, at cheap costs, are genuinely concerned with the event, but are helpless in the face of the crisis. Venkataswamappa is awaiting an initiative from his village. Unfortunately his village is yet to come within the purview of Zilla Parishad Act. He is prepared to offer his advice and help for developing the gomal lands of the village but shies away from electoral politics implied in the Panchayat System. The reason why we prefer a non-elective principle for Natural Resource Panchayats, is to tap the expertise of people like Venkataswamappa.
48. See Ramachandran (1988, p.17).

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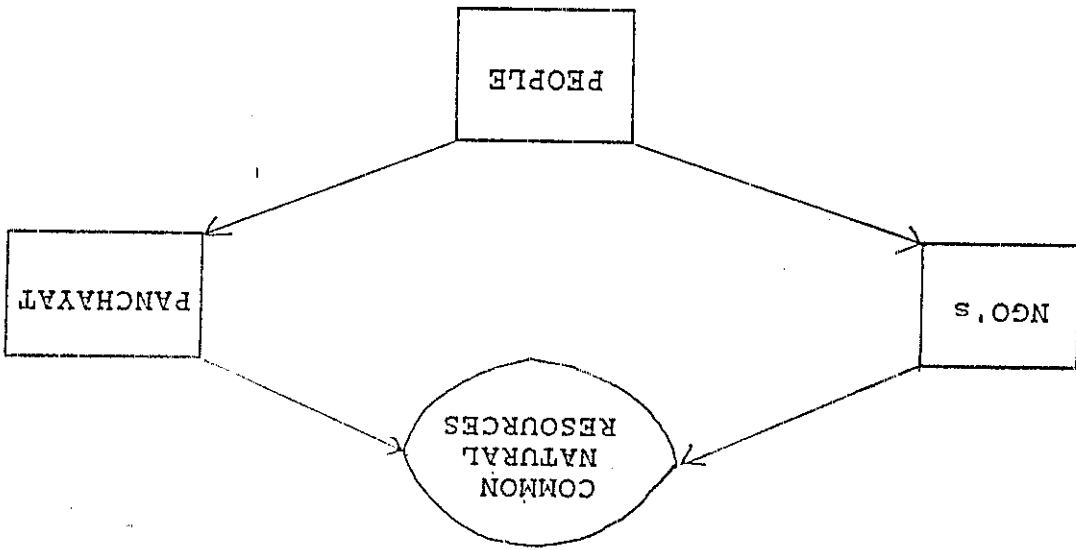
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2. Where NGOs alone contribute to CNR management with people's participation



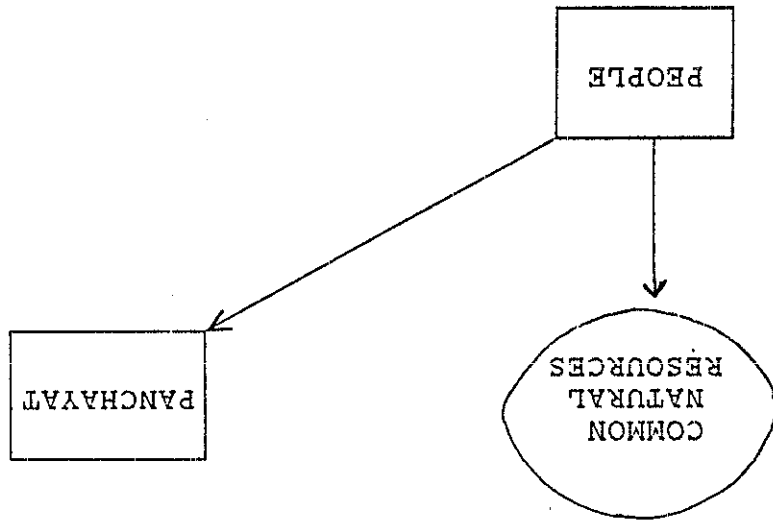
1. Where NGOs and Panchayats contribute to CNR management separately, with people participatory)

I. THE HORIZONTAL DIMENSION

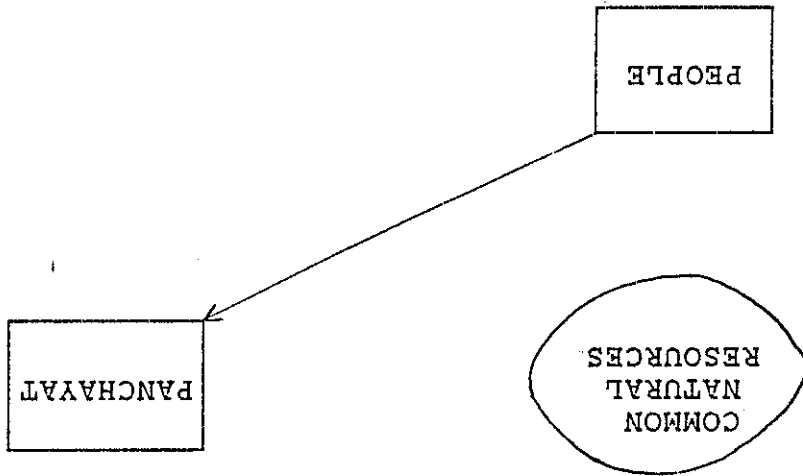
SCENARIOS OF LOCAL RESOURCE MANAGEMENT

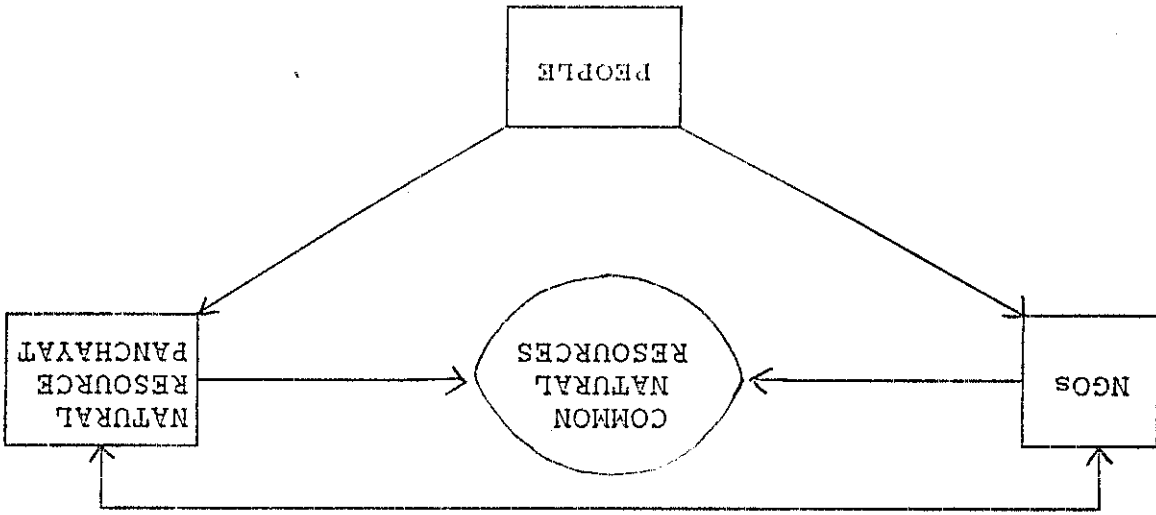
APPENDIX I

4. Where NGOs do not exist and people alone contribute to common natural resource management without Panchayat support

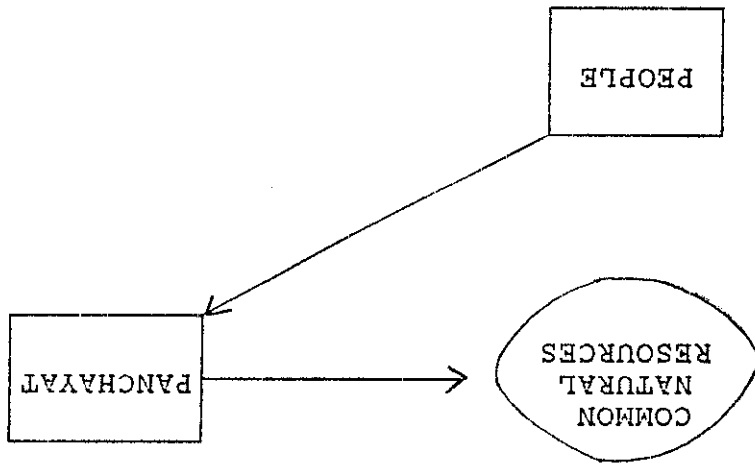


3. Where no NGOs exist and neither the Panchayat nor the people contribute to common natural resource management = Management by the bureaucracy

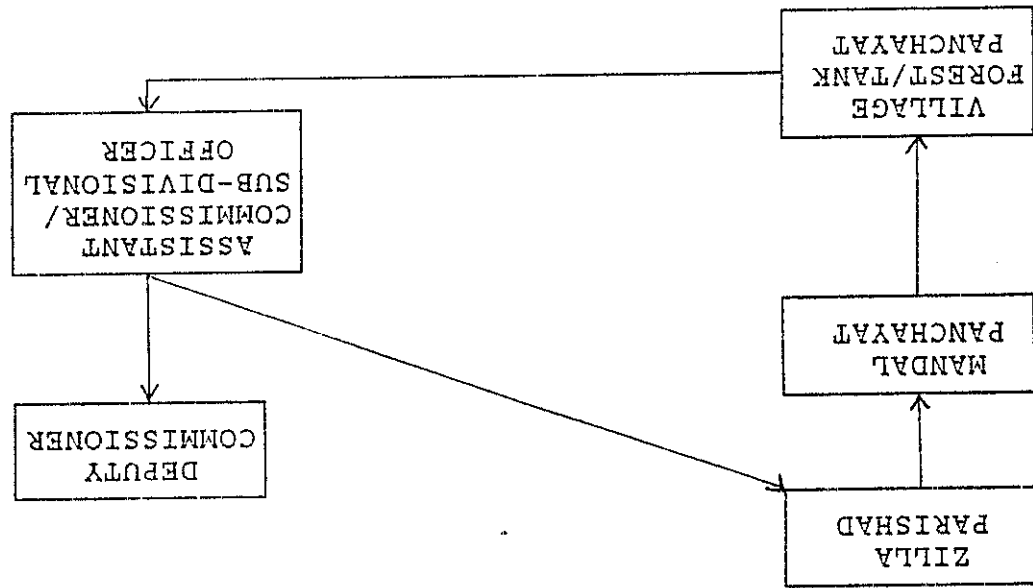




6. Where Natural Resource Panchayats are established and contribute to CNR management in tandem with NGO

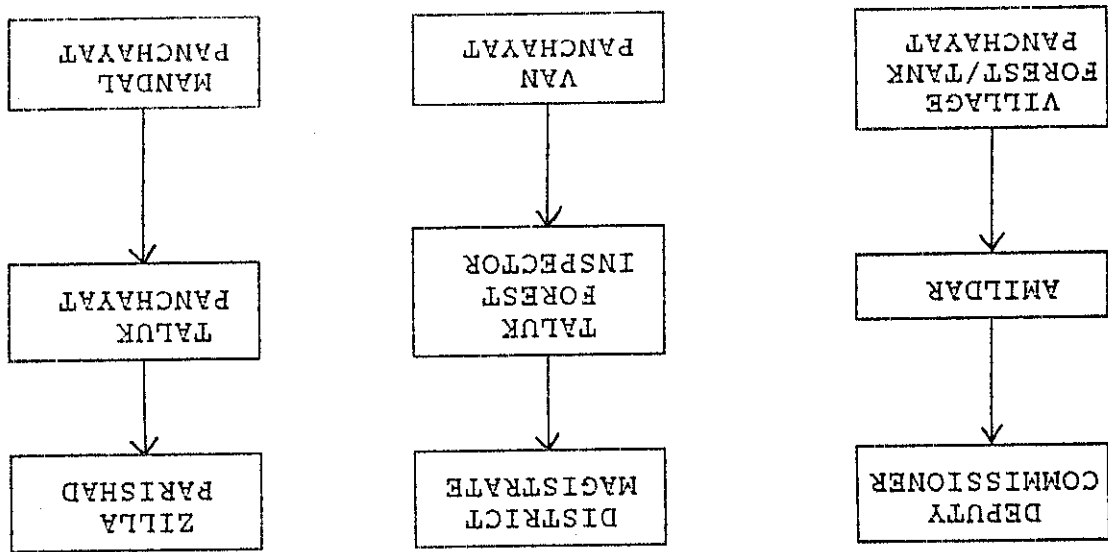


5. Where Panchayats contribute to CNR management with peoples' participation - A Non-NGO scenario



4. Two Tier/Three Tier Models for Van / Tank Panchayats

PROPOSED VERTICAL LINKAGES



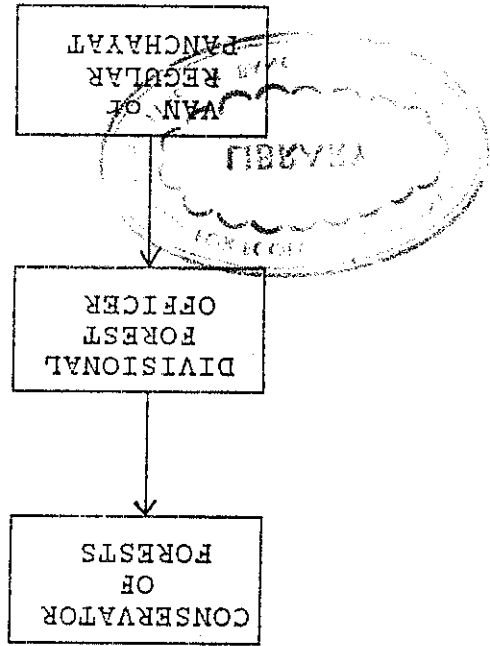
1. Old Mysore

2. Uttar Pradesh Hill Districts

3. Karnataka post = 1983

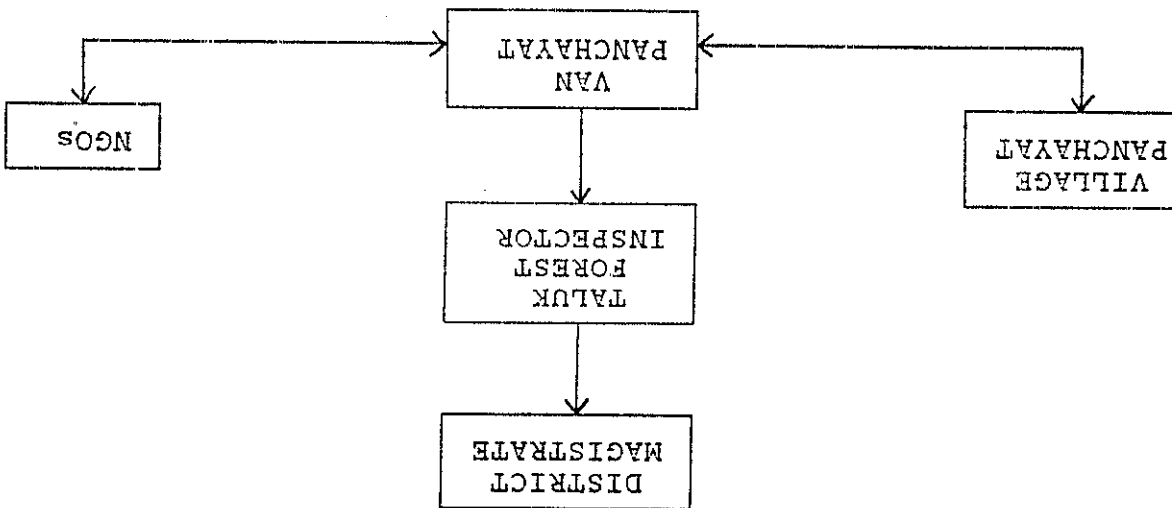
II THE VERTICAL LINKAGES (EXISTING)

SCENARIOS OF LOCAL RESOURCE MANAGEMENT



6. Single Tier Model.

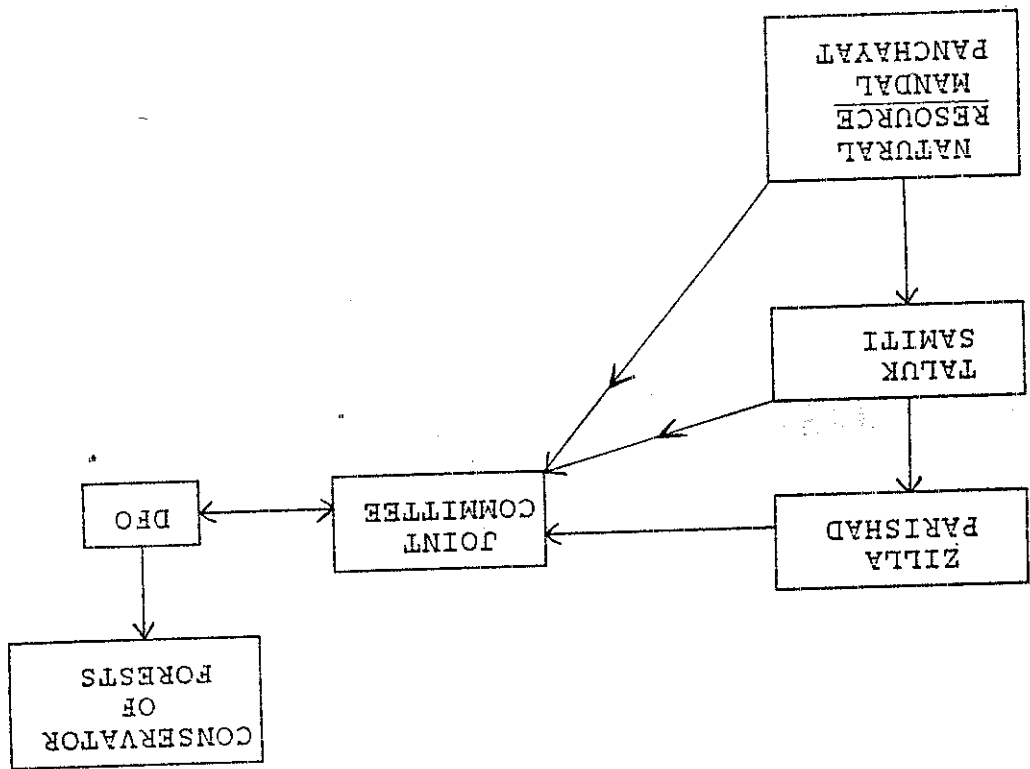
PUBLIC LANDS / RESERVED FORESTS



5. Single-Tier Model



\*AVN



7. Three Tier Model

PUBLIC LANDS / RESERVED FORESTS