

THE POLITICAL ECONOMY OF DECENTRALISATION AND FOREST RESOURCE MANAGEMENT (FRM): A STUDY OF THE EFFECTIVENESS OF DECENTRALISED FRM INSTITUTIONS

Dr. Lavanya Suresh

Assistant Professor,
Department of Humanities and
Social Sciences

Birla Institute of Technology &
Science-Pilani, Hyderabad Campus

RESEARCH QUESTIONS

- ❖ What is the role of local institutions in the management of the resource?
- ❖ How do local institutional arrangements- such as formal rules, informal norms and modes of behaviour etc. affect the way in which resources are managed?
- ❖ Do different combinations result in more effective or less effective management of the resource?
- ❖ How do these arrangements affect the attitude of the people towards the conservation of the resource?

OBJECTIVES

1. To examine the context where in decentralisation is effective in terms of natural resource management and
2. To investigate how the forest has been defined and perceived by different stakeholders and how their perception on resource use has been affected by the presence or absence of institutions of decentralised FRM

Theoretical Foundation

- Two approaches of Political Economy:
 - System approach
 - Institutional approach
- Institutional approach- Relationship between democratic institutions and their influence on outcomes in a welfare state (Andersen, 1990, p. 15)
- In the literature of decentralisation a number of studies have focused on how different institutional arrangements have an impact on outcome (Agrawal and Ribot 1999), (Fox 1996), (B.S Baviskar 2005)

Theoretical Foundation

Institutions

Douglass North, who defined institutions as, 'Humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).'

Types:

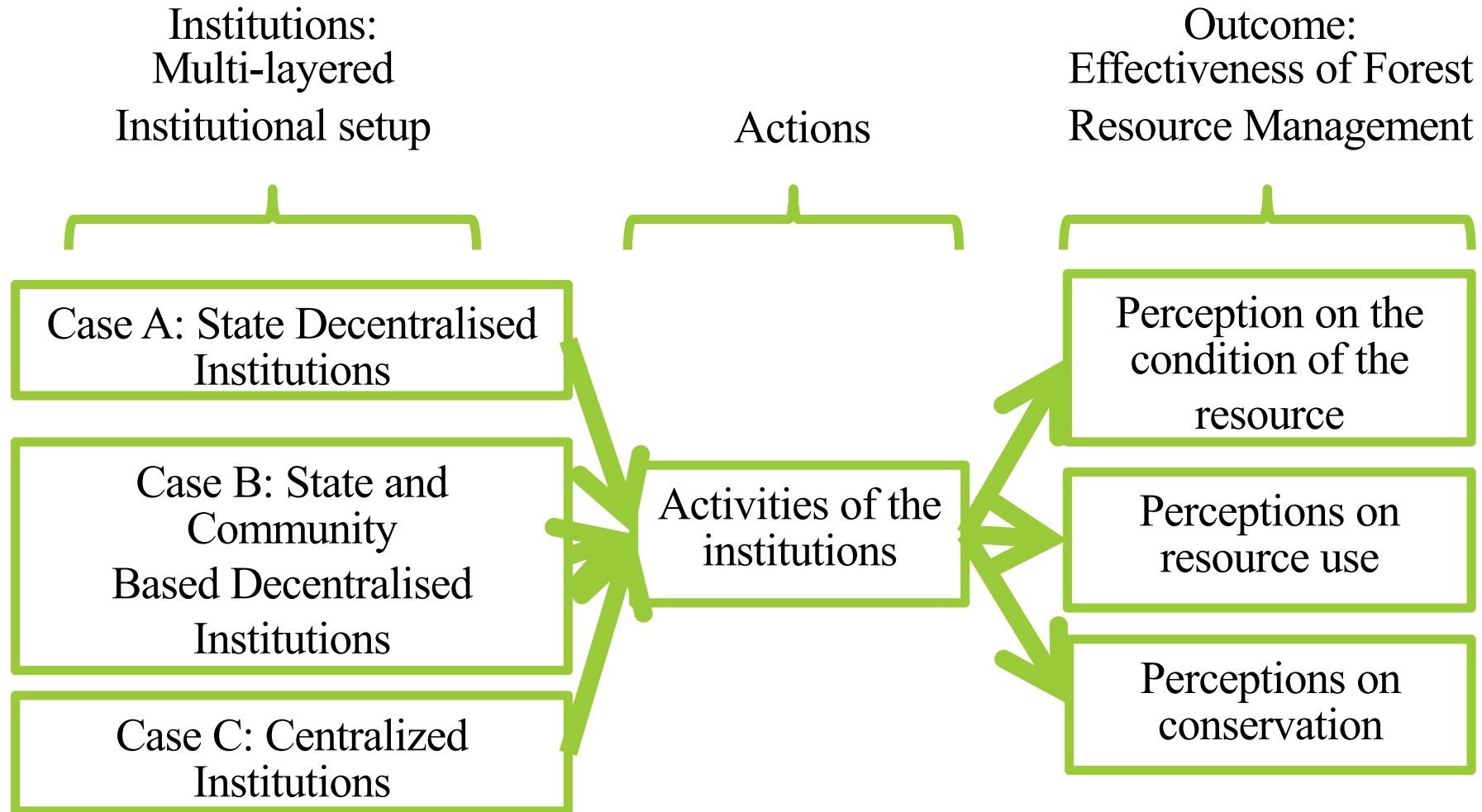
- *De jure* institutions (Kruseman & Pellegrini, 2008) are formal rules that have government backing and well-defined customary law
- *De facto* institutions (Knight, 1992) are culturally accepted norms and modes of behaviour that can be self-enforcing in the sense that no external authority is available to guarantee that social actors will respect them and social institutions that are also to a great extent *de facto*

Theoretical Foundation

Role of local institutions in forest resource management

- The focus of this institutional analysis is on the relationship between institutions of resource management and their influence on outcomes. The outcome here being; how effective these institutions are at managing the resource
- It is the perception of these communities towards natural resource management that is the measure of effective management
- Perception based methods can be defined according to Lund, Balooni and Puri (2010) as 'eliciting peoples' assessment of the status and/or development of forest condition or indicators of forest condition through interviews, surveys, or participatory rural appraisal techniques.'
- It looks for local ecological knowledge and builds upon native understanding and perceptions

Analytical Framework



Methodology

- Case studies were conducted
- The villages for the case studies were selected from the forest divisions through a stratified random sampling method
- Data has been collected using a household survey
- The survey was administered to the head of households
- The number of households surveyed was 135
- The respondents of the survey belong to an official category called 'Primitive Tribal Groups' (PTGs) (Planning Commission)
- Focused group discussions and in-depth open ended interviews were also conducted

The contribution of local institutions in Nilgiri district to Forest Resource Management

- Institutions analysed – VFC, EDC, Keystone and NAWA
- Activity Mapping
 - Direct conservation related activities
 - Regeneration activities
 - Maintenance of forest
 - Conservation of water
 - Protection of the forest
 - Economic activities
 - Reducing dependency on the forest
 - Related to Non-timber Forest Products (NTFPs)
 - Building Social Capital
 - Awareness creation
 - Empowerment
 - Advocacy
 - Development programmes
 - Documentation
 - Networking

Tribal Panchayats

The primitive tribal groups who are the respondents of the study have a historic connection to the forest. Many of their activities are directly connected with the forest:

- Sacred ceremonies
- Marriage ceremony
- Housing
- Cultivation
- Harvesting
- Sacred groves



Measures of Effective Forest Resource Management

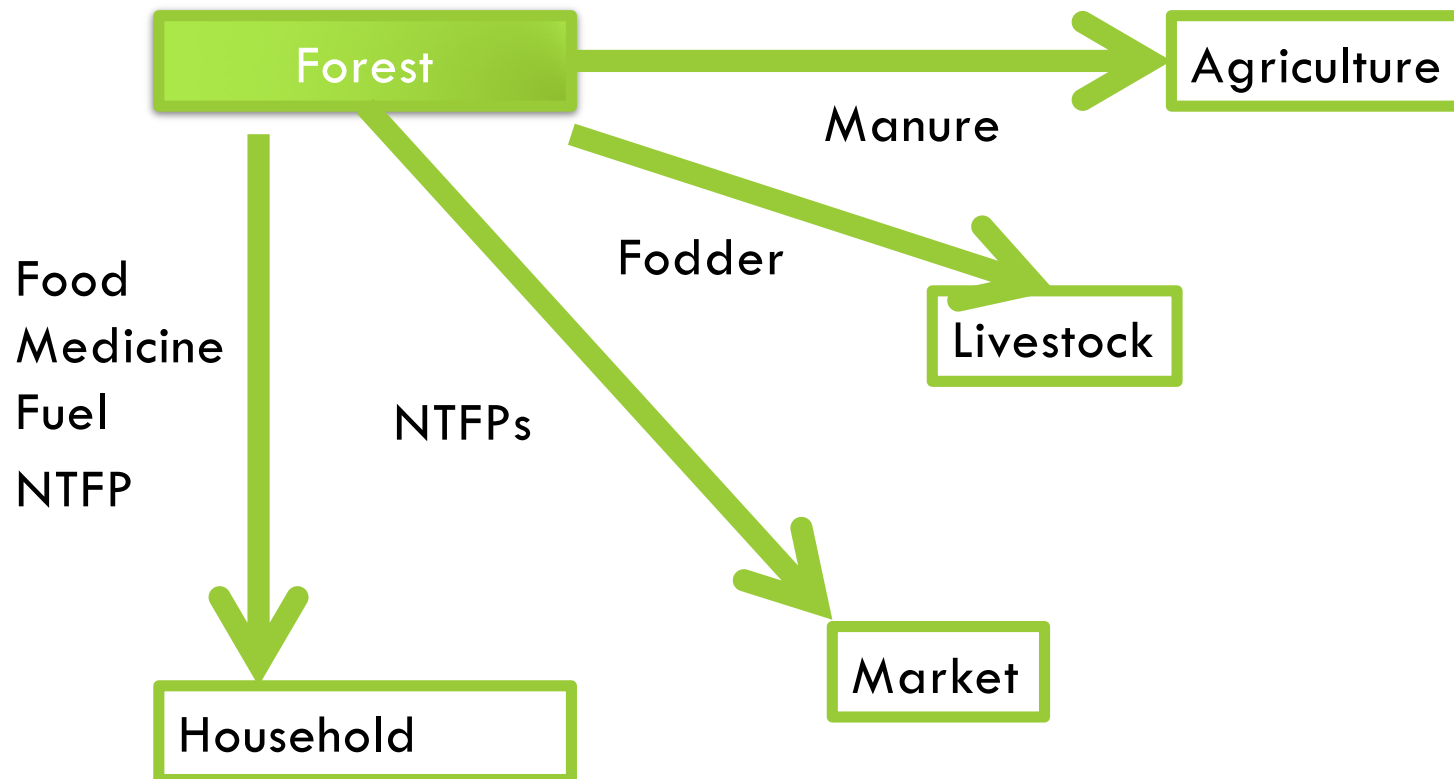
Perception based indicators

- International Forestry Resources and Institutions (IFRI) field manual as the bases of research - Varughese and Ostrom (2001), Gautam (2007), Nagendra (2002), Balooni et al. (2007), Gautam and Shivakoti (2005), Agrawal and Chhatre (2006), and Nagendra et al. (2005)
- Forest condition - Thoms (2008), Agrawal and Yadama (1997), Conroy et al. (2002) and Agrawal and Chhatre (2006)
- Indicators of non-timber forest product availability and use -Husain and Bhattacharya (2004), Meshack et al. (2006), Balooni et al. (2007) and Palmer and Engel (2007)
- Pokharel and Suvedi (2007) developed perception indicators by enabling representatives and local forestry professionals of the areas of study to develop the indicators themselves

Measures of Effective Forest Resource Management

Here, the indicators are developed looking at the effects of the institutions activities and their impact on people's dependency on the forest and their attitude towards conservation of the resource

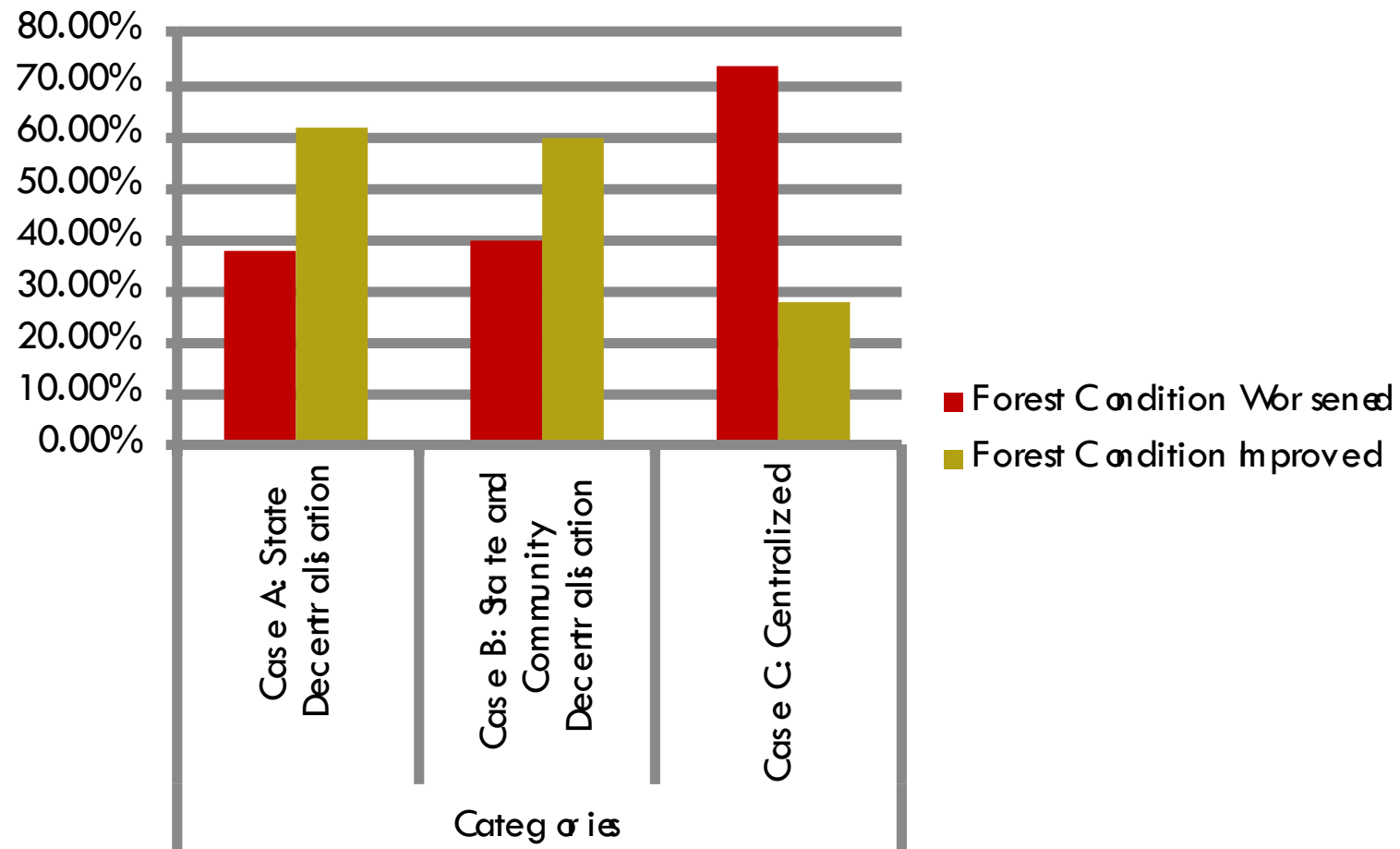
People's dependency :



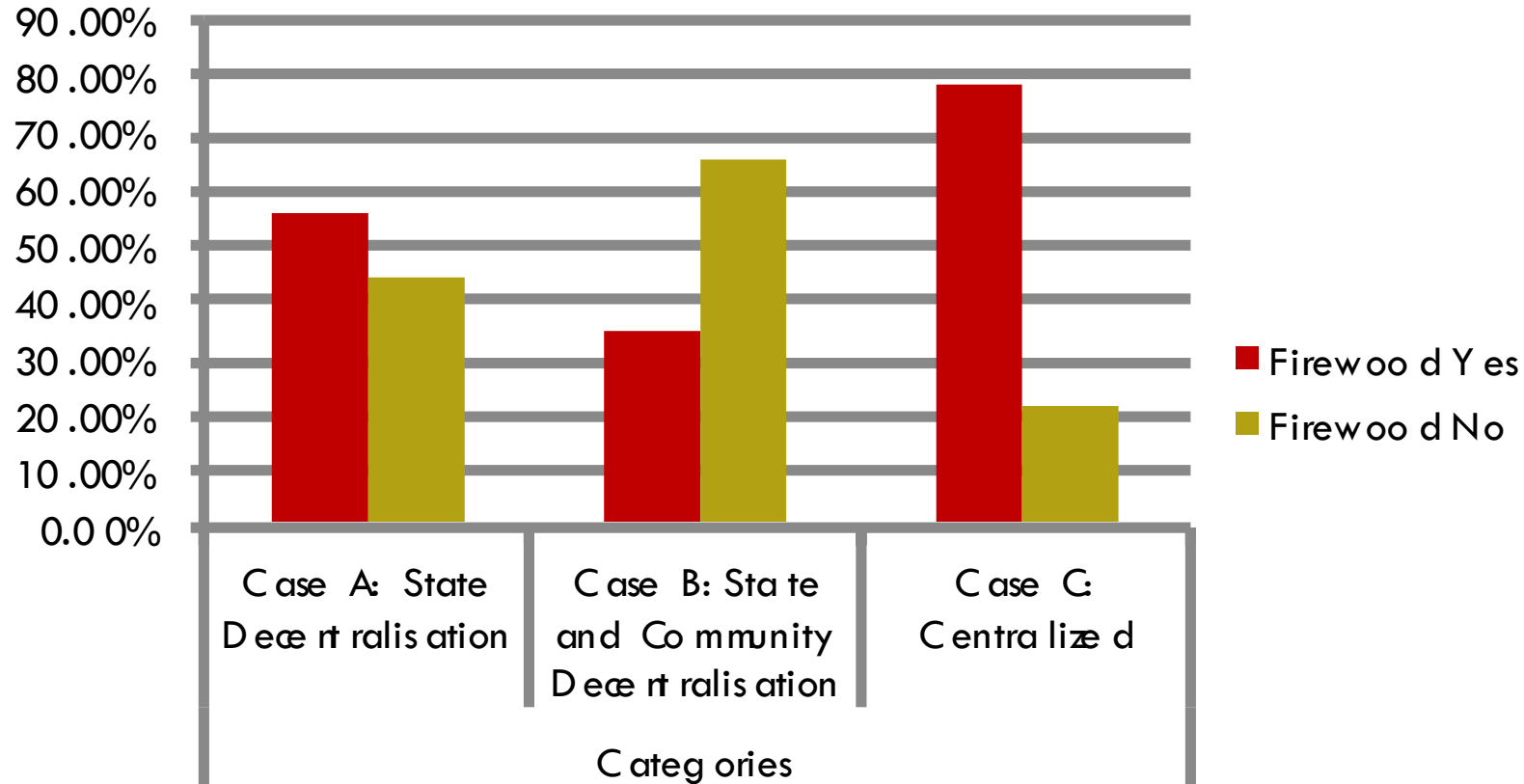
Measures of Effective Forest Resource Management

| Indicators | Measure |
|--|--|
| Forest Condition | Percentage of users who said that the conditions have improved |
| Use of fire wood | Percentage of users who use only fire wood |
| Access to fodder | Percentage of users obtaining fodder |
| Access to forest for grazing | Percentage of users who allow cattle to graze in the forest |
| Use of compost | Percentage of users collecting leaf litter |
| Use of non-timber forest products (NTFP) | Percentage of users who felt that the extent of collecting non-timber forest products (NTFP) has increased |
| Awareness about forest regulations | Percentage of users who said that they had knowledge of Forest rights act and Gram-Sabha under it |
| Forest fire | Percentage of users who said they had reported forest fires |
| Incidence of Illegal activities | Percentage of users who felt that number of poaching and illegal activities have reduced |

Forest Condition



Fuel



- Approximately, for one household, the amount of firewood required for a week is 60 kilos and for a year per village needs about 87 tons
- The amount taken from the forest is about 85% and agriculture wastage and kerosene given by the government satisfies 15% of their fuel requirement

Non-Timber forest products (NTFPs)

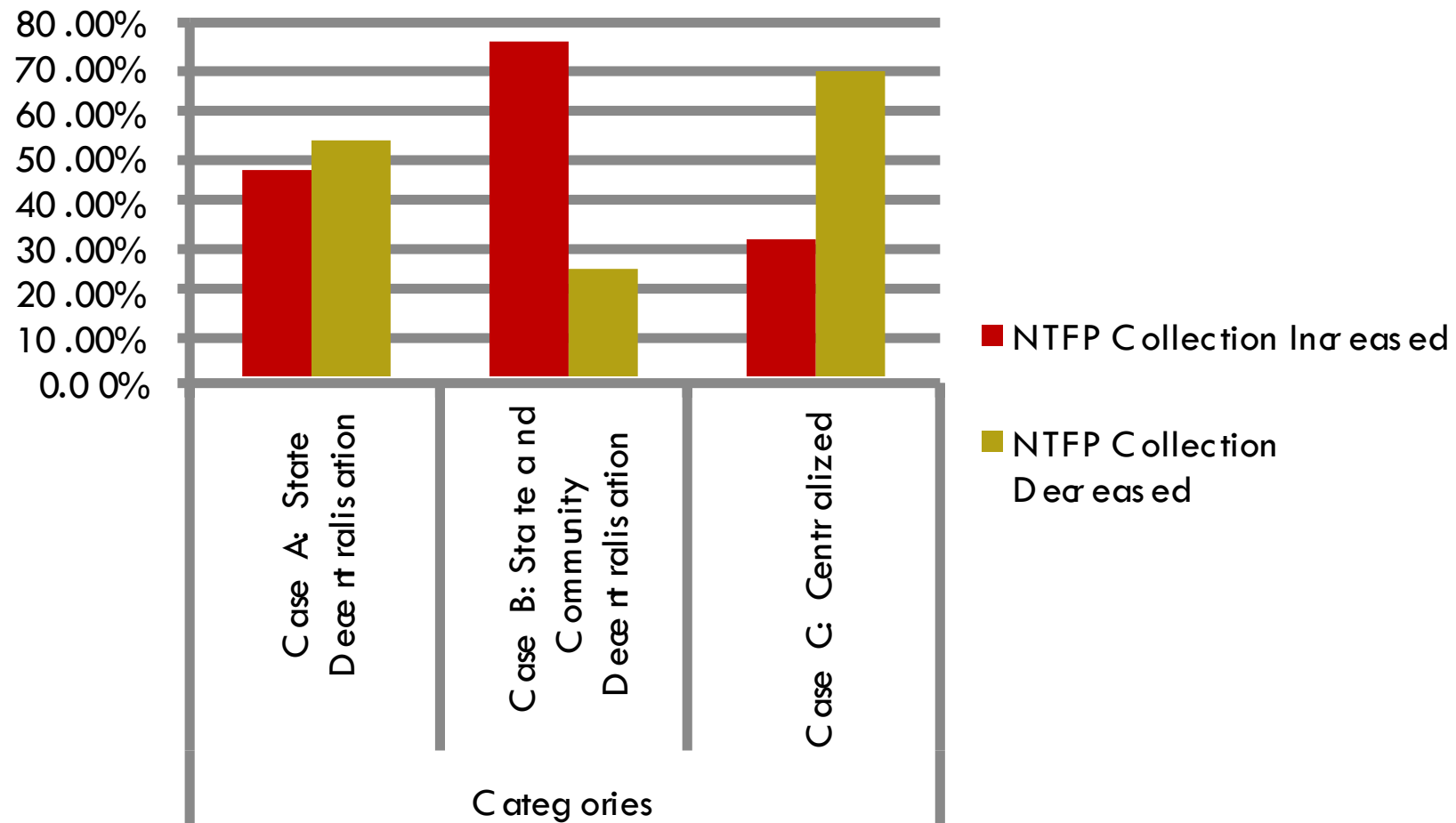
| S.No: | Local name | Botanical name |
|-------|----------------------|---|
| 1. | Shikakai | Acacia concinna |
| 2. | Nellikai | Phyllanthus embilica |
| 3. | Kadukai | Terminalia chebula |
| 4. | Poochakai | Sapindus emarginatus |
| 5. | Bamboo | Bambusa bambos & Dendrocalamus strictus |
| 6. | Eecham /Seemar | Phoenix humilis |
| 7. | Puli | Tamarindus indica |
| 8. | Mahavalli Kilangu | Decalepis hamiltonii |
| 9. | Eendh maram | Cycas circinalis |
| 10. | Soondakai | Solanum torvum |
| 11. | Kodampulli | Garcinnia gummigutta |
| 12. | Pattu Seegai | Acacia spp. |
| 13. | Dhoopam | Canarium strictum |
| 14. | Jathikai | Myristica dactyloides |

Non-Timber forest products (NTFPs)

List of some of the herbs collected from the forest and their use is compiled below:

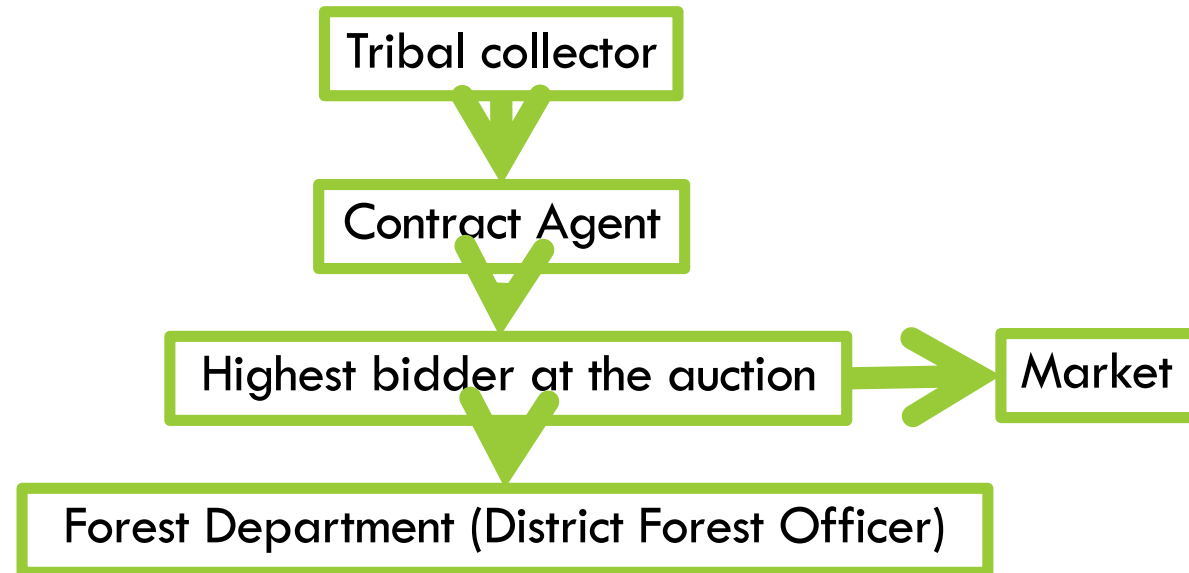
1. *Eruiku*: Grind the leaves, make a paste, roll it till it is the size of a small coin and give it to those who have been bitten by a snake immediately
2. *Eluithane poondu*: With the juice of this leaf, add an equal amount of gingerly oil and boil properly. If this is rubbed on the body, it will cure skin diseases
3. *Kadaikkai*: this is consumed to make the body healthy, to reduce acid reflux, to strengthen muscle, to increase bowel movement, to help digestion
4. *Karuveil*: boil the bark and gargle. It is good for mouth ulcer, gum damage, gum decay and loss of teeth
5. *Kavilthumbai*: Sauté the leaves with honey. Then boil in water and drink morning and evening. It will help to cure pain
6. *Kupaimaine*: The leaf, some turmeric, salt, all should be ground together and spread on the body. After this you should bathe. This will cure skin disease.
7. *Kovai*: two green unripe fruits should be eaten every day for diabetes
8. Sandal wood: Neekia (gooseberry) juice, about 15 milligram + a coin size amount of sandal wood paste must be taken for 40 days, it too is to help with diabetes
9. *Sivakarendai*: if applied for a long time the face will become beautiful

Non-Timber forest products (NTFPs)



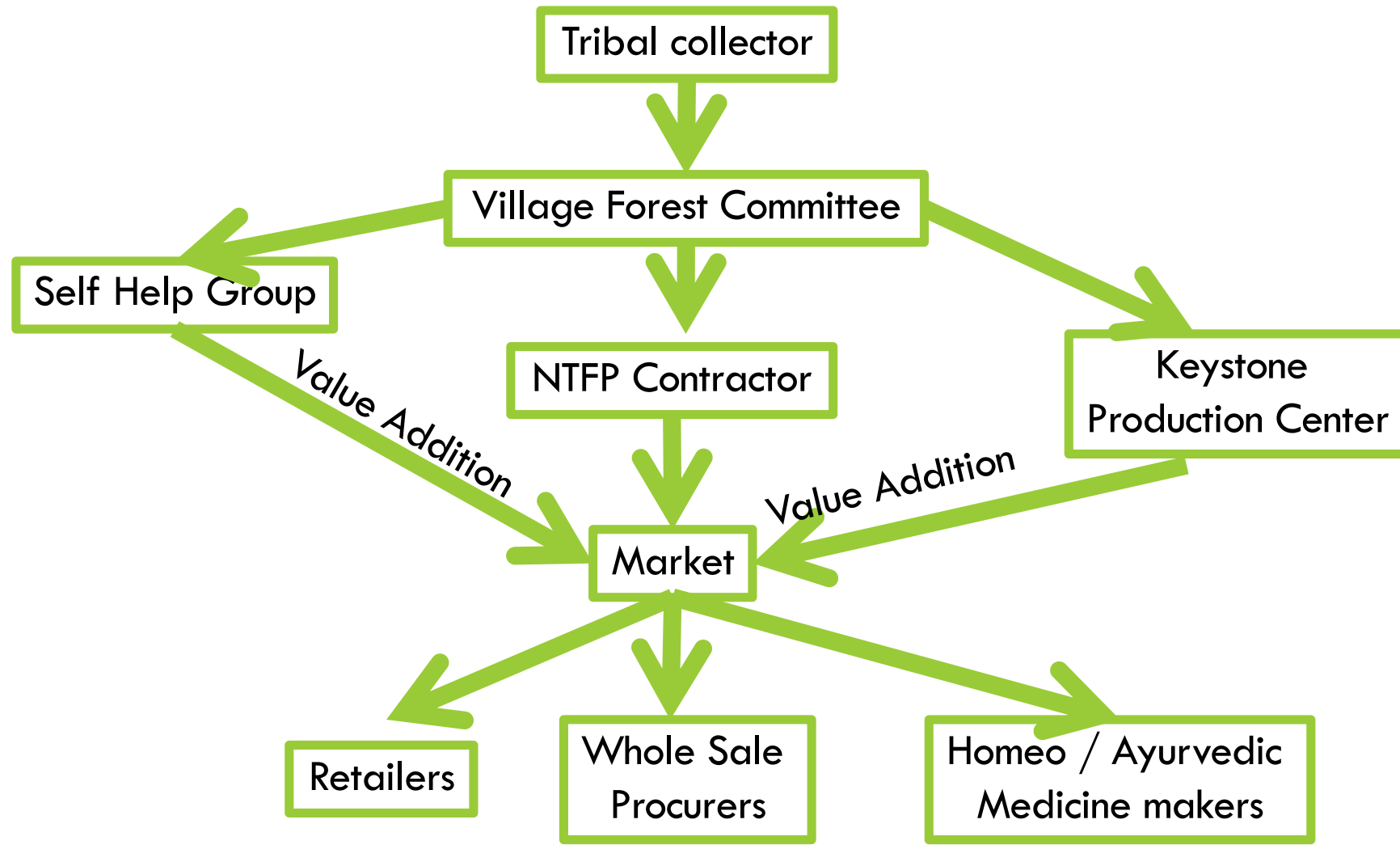
The NTFP trade systems

Case C

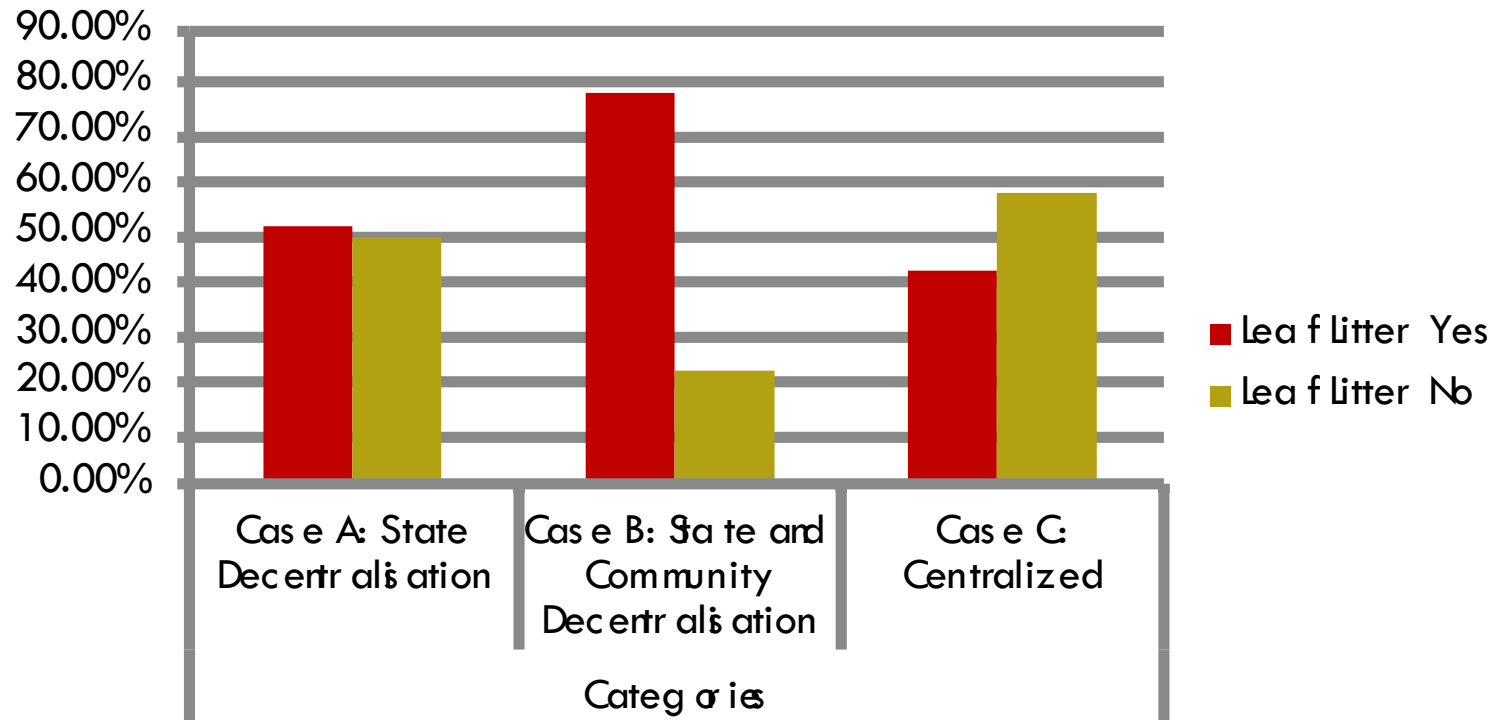


The NTFP trade systems

Case B



Agricultural and livestock

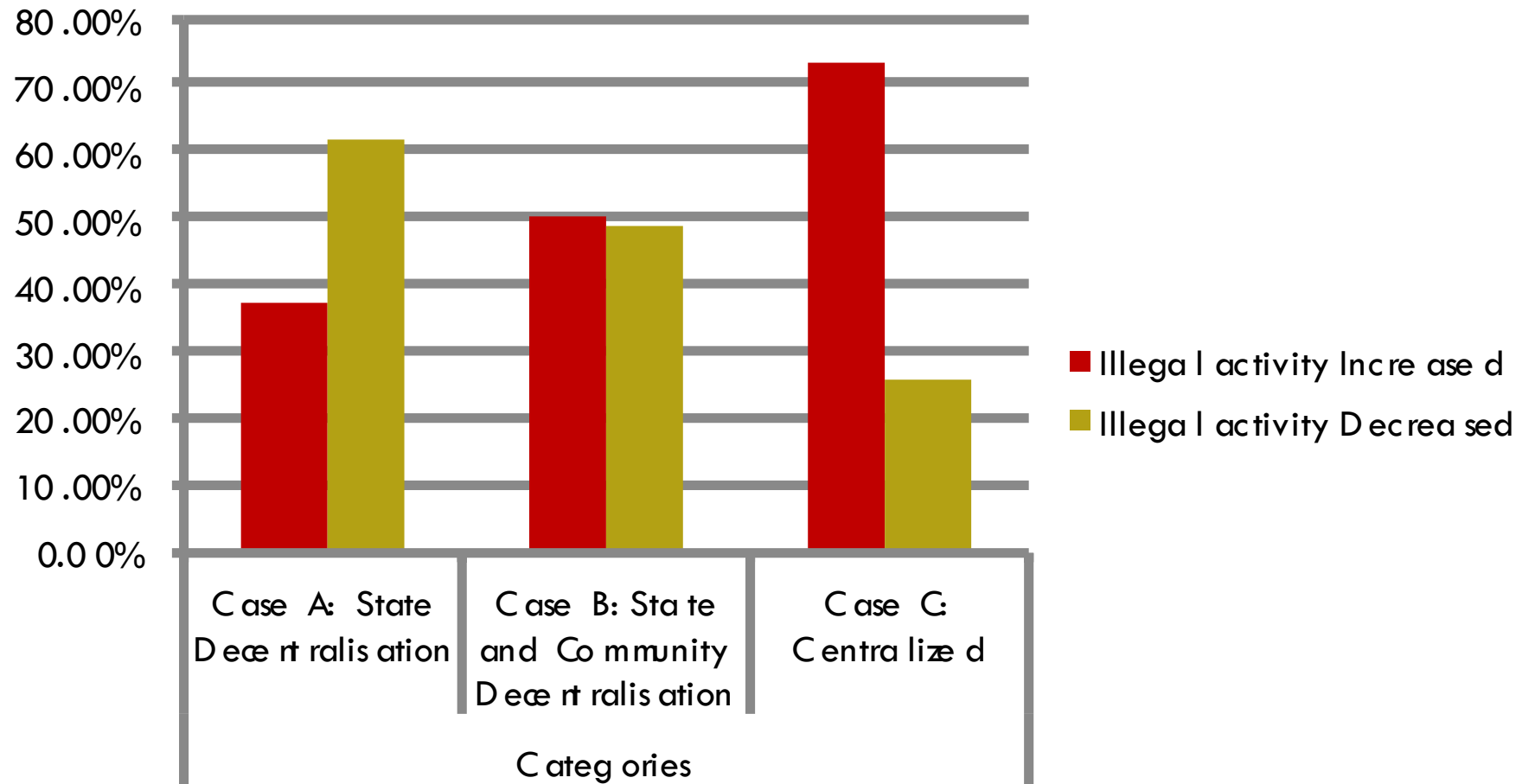


- Among the households surveyed in Case A, only 31% collect fodder from the forest, whereas in Case B and Case C the numbers are much higher as 74% and 67% , respectively, stated that they collect fodder from the forest
- 67% of the respondents in Case A said that they do not allow their cattle to graze in the forest. But at the same time 68% of the respondents in Case B and C stated that they do allow it

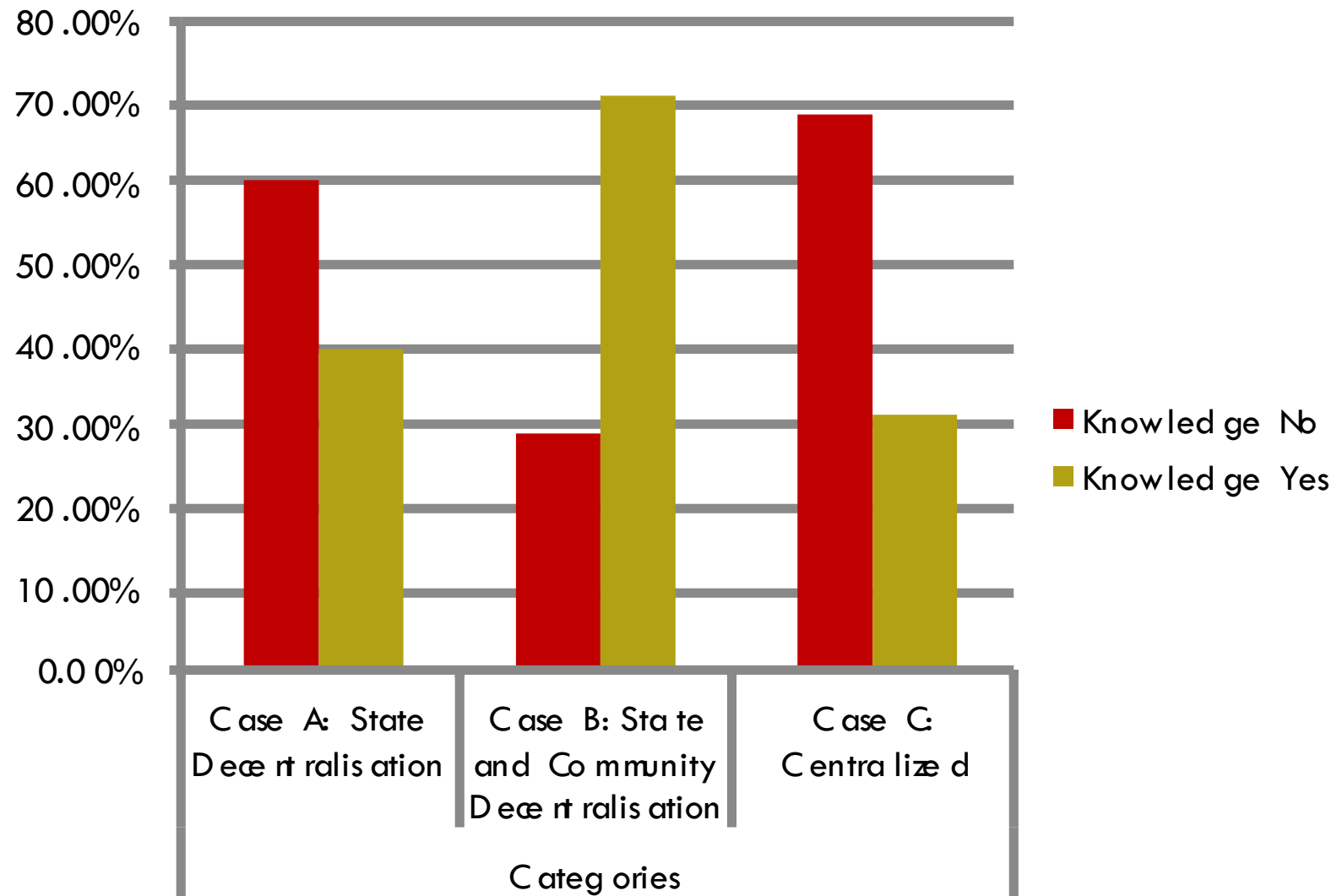
Forest Fire

- The survey shows that in Case A, 38% have reported forest fires, in Case B 44% and in case C only 24%
- When the people were asked about incidents of forest fire they said that they were concerned, across the board in all three cases
- But with regard to response of the forest department the reply was varied across the cases. In *Attadi*, which is a Case A village, they said the response was quite good and the forest department took care of the situation.
- However, in *Anakati* which is a Case B village the response was different. The tribals said that earlier they were given free access to the forest and were able to spot incidents of fire immediately and report it
- It is all the fault of the 'outsiders', according to them

Illegal activity



Awareness



Summary of analysis

- Villages that have any form of decentralised system feel that the condition of the forest is better. The forests are perceived as healthier in these villages.
- The incidence of collection of firewood also is low in these cases, mostly in Case B, which has both state and community initiated institutions of decentralisation. The centralised case fairs poorly on both these indicators.
- The extraction levels are much higher in Case B than in any of the other cases
- On the protective instincts indicators Case A and B, which have some form of decentralisation fare much better than the centralised case.
- In terms of awareness, Case B stands apart as people being very aware

Conclusions

- Decentralised institutional setups do change the perception of people to the forest in a positive manner with two major caveats:
 1. The resource users need to have an incentive to conserve
 2. The overall regulation of the state is still required
- We make a case for a multi-tiered system where each tier operates within its sphere of competence.
- It could be concluded that the principle of subsidiarity works within a political economy structure driven by institutions and incentives provided
- The institutions have a distinct impact on the outcome of natural resource management and this behaviour is driven by the incentives of the market as well as the regulation of the state

Thank you

