

**EXTENT AND DEPLETION OF COMMON  
PROPERTY RESOURCES (CPRs) IN CPR-  
DEPENDENT WOMEN'S WORK: AN ANALYSIS BY  
AGRO-CLIMATIC ZONES IN INDIA**

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## **LIST OF ABBREVIATIONS**

UTs	UNION TERRITORIES
ACZ	AGRO-CLIMATIC ZONES
NSSO	NATIONAL SAMPLE SURVEY ORGANISATION
CPRs	COMMON PROPERTY RESOURCES
PC	PLANNING COMMISSION
HH	HOUSEHOLDS
HA	HECTARES
PAS	PRINCIPAL ACTIVITY STATUS
MPCE	MONTHLY PER CAPITA EXPENDITURE
SCs	SCHEDULE CASTES
STs	SCHEDULE TRIBES
OBCs	OTHER BACKWARD CLASSES

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# CHAPTER-1

## 1.1 STATEMENT OF THE PROBLEM

CPRs play an important role in the rural economy of India. The study of CPRs has been started way back in the 1980s. Common Property Resources (CPRs) as the name suggests constitute all the resources which are meant for the common use of the villagers. In the pre- British India, a very large part of the country's natural resources was freely available to the rural population. These resources were largely under the control of local communities. But, when the state extended its control over these resources, resulted in decay of the community management system, CPRs which were available to the villagers started declining. Common Property Resources has declined from (24-30%) over these three decades (Jodha, 1986). Several factors have contributed to the decline of CPRs over these years but one of the most important factor is the “**privatisation of CPRs**” as a pro-poor strategy to help these poor people but instead it has done no benefits to them as they have lost their control over it, and the real beneficiaries of these resources were the non-poor one. One other major factor, which has contributed to this decline, is population pressure. As the depletion of CPRs has directly affected the livelihoods of the poor people, and among them, *women* are the worst ‘*victims*’ of this depletion. As they are responsible for the collection of fuel, fodder, bringing water from outside premises for their sustenance, they have to spend now extra time to fetch all these things and also cover a lot of distance to collect the same. Their work pattern has been totally changed due to the depletion of these natural resources. **Here, it is an attempt to study the** CPRs, their availability, depletion and their impact on the rural poor, especially the rural women and also their livelihood and who are the worst affected across different State Agro-Climatic Zones, at the State level and also at the India level.

## 1.2 CPRS and THEIR CONTRIBUTIONS TO RURAL ECONOMY

Jodha (1985a) has elaborated the benefits and contributions made by CPRs to the rural economy which are as follows:

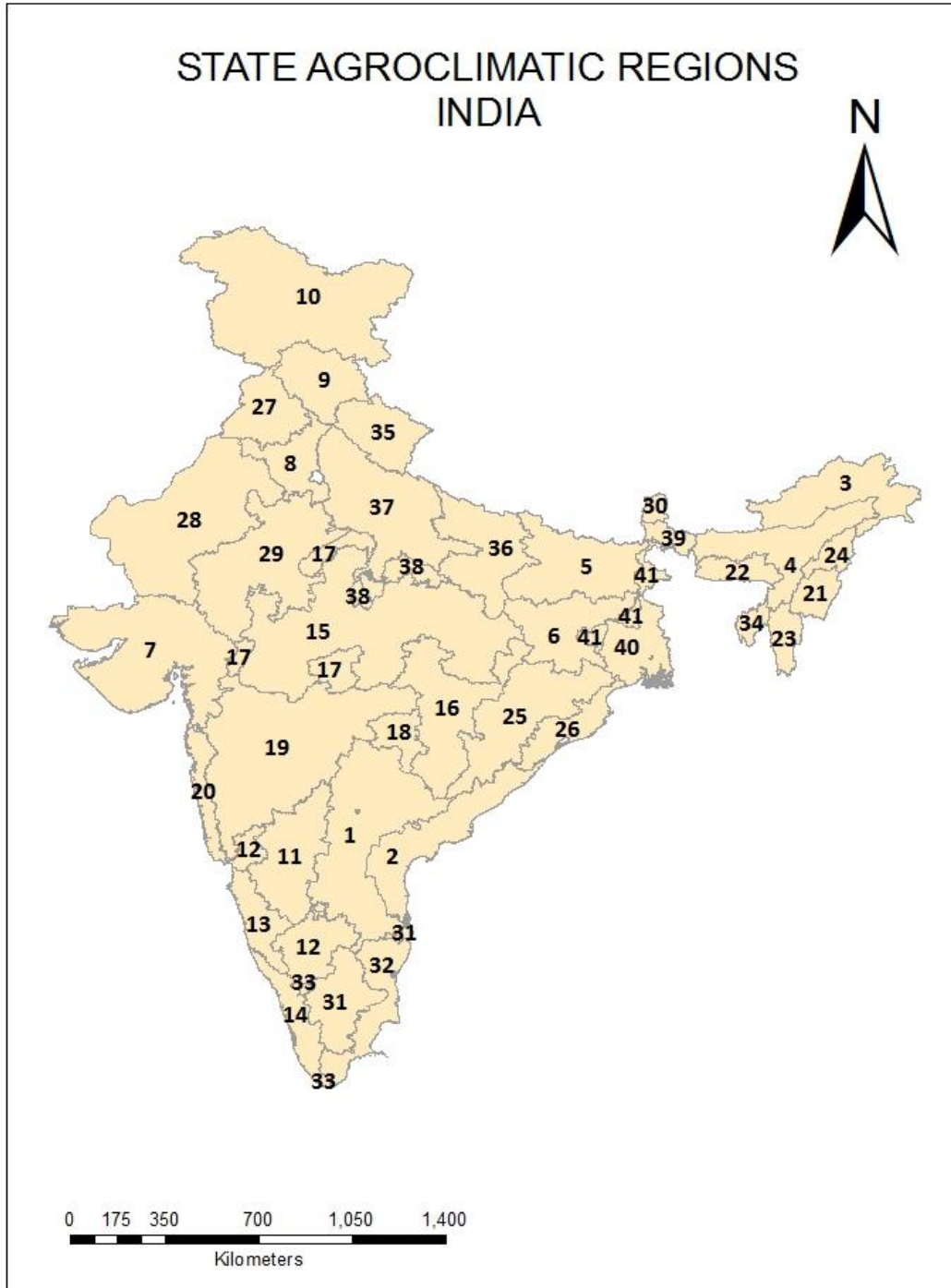
- a. Through the supply of fodder and grazing space some CPRs help individuals in saving their land for crops. These CPRs help in sustaining a number of animals for draft and livestock production which would not have been permitted by individuals' owned land, especially small farmers.
- b. CPRs like dry beds of rivers/tanks used to collect irrigation water play an important resource –augmenting role in the private property resource (PPR) based farming system.
- c. The traditional farming systems in dry areas partly derive their stability and viability through integrated production strategy involving crops, livestock, trees/bushes, while the latter being less sensitive to temporal variability of rains. For e.g., village forests, grazing lands, rivulets, and watershed drainages play a significant role in this strategy.
- d. CPRs act as sources of physical supplies as well as employment and income, cushion dry land farmers' welfare during crisis periods, e.g., droughts.
- e. CPRs (act as resource-poor households, unlike the rich) help in reducing rural inequalities generated by the PPR based farming system which are partly reduced, significantly supplement their income from CPRs. It also greatly help in contributing to the poor man's nutrition by facilitating his food gathering from forests, ponds , and other sources and strengthening his self- provisioning system.

**Fig 1.1 (a)**



Note: Except Island groups of Andaman & Nicobar Islands & Lakshadweep Islands.

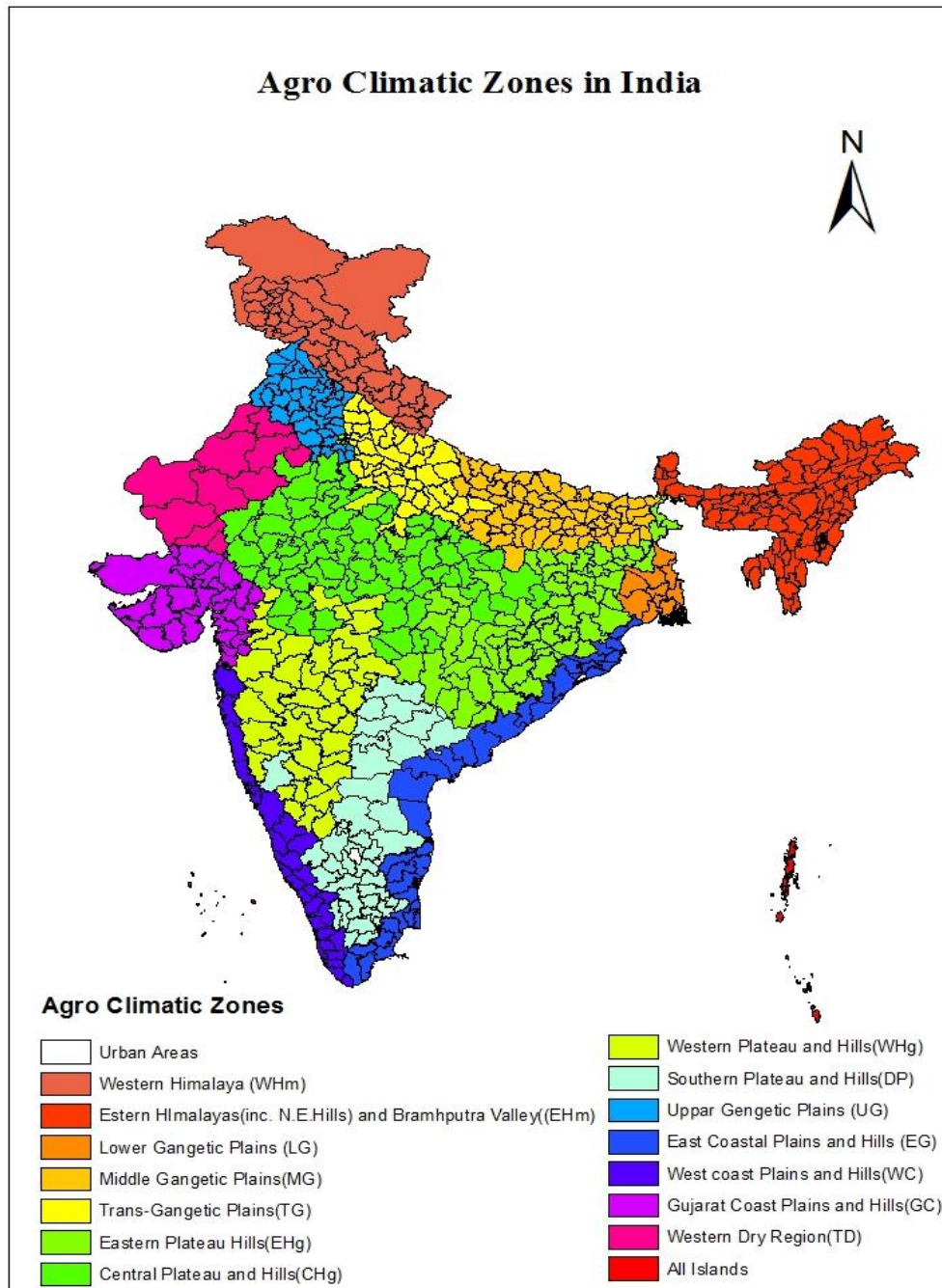
Fig.1.1 (b)



Note: Except Union Territories of India.

See Appendix Table 1.1

Fig 1.1(c)



Source: NSS Report No.452, 1998.

### 1.3 RESEARCH QUESTIONS

Although, the CPRs, its utility, its availability and depletion has grabbed a lot of attention by the researchers in their earlier works, yet in present work, here is an attempt to analyze the change in work pattern of women affected by the depletion of CPRs using unit level data across Agro – Climatic Zones of India. Though, CPRs & its depletion have been dealt at the national level, but less attention has been paid to the women's works which are related to the CPRs (i.e. fuel, fodder collection, collection of water from outside household premises).

The present work tries to explain the direct/ indirect impact of CPR depletion on the womens' work pattern. Considering the previous researches which are related to CPR depletion in India in dry/arid zones, its importance to the poor in India, it is also necessary to study the gender dimensions in India. *How CPR impact the life of rural women across different regions in India. Does CPR play an important role in the life of rural women? If yes, then how it has affected their daily work and what are the factors which have increased their work pressure?*

More emphasis is given to the CPR and its relevance to the rural economy. But less emphasis is given to the women's part though they are the direct victims of CPR degradation and depletion. Present study tries to explain the impact of CPR on womens' daily life. The factors responsible for their condition and how their work pattern has changed due to the CPR depletion across ACZ regions. Which type of work do they prefer the most? The women who do not have much access to get involved in which type of CPR activities. *It is also hypothesised that CPR provides livelihood to poor women, but who are the most affected. To test this, various socio-economic parameters have been used across level of education, Monthly Per Capita Expenditure group, Operational Holdings and various social groups (SCs, STs, OBCs & Others).*

#### **1.4 OBJECTIVES OF THE STUDY:**

- To study the availability & depletion of CPRs across State Agro-Climatic Regions in India.
- To analyse the relationship of CPRs with the rural women's livelihood and also change in the CPR dependent activity carried out by rural women of two time periods, i.e (1999-00 to 2009-10) across State Agro-Climatic Regions in India.
- To analyse the CPR dependent work of rural women by different Socio-economic parameters.

#### **1.5 DATABASE**

To analyze the rural women work pattern in India, due to the depletion of CPRs, quinquennial survey report and data on Employment and Unemployment Situation in India by National Sample Survey Organization has been used for the study. Data has been taken from the following rounds –

54<sup>th</sup> Round – Report on Common Property Resources in India (January 1998 –June 1998),

55<sup>th</sup> Round (July 1999 – June 2000),

66<sup>th</sup> Round (July 2009 – June 2010).

For analysing the work pattern of women across two time periods, i.e. 55<sup>th</sup> & 66<sup>th</sup> Rounds, number of variables have been taken into account which include Usual Principal Activity Status of non-women workers involved in domestic activities and also include activities other than domestic chores (like collecting fish, fruit, small games, etc., collection of firewood, and also collection of water from outside the household premises.

## 1.6 METHODOLOGY

This part of the study has tried to relate with two issues, viz. the Common Property Resources, their extent & depletion with women's work dependent on CPRs and also tries to relate their work with the increase or decrease or does not change in the present times.

The data used for the CPRs used in this study is available only for one period of time, i.e. only for the year 1998 conducted by the **National Sample Survey Organization** and no further study has been conducted for the present times for the Common Property Resources. It has also been assumed that the **54<sup>th</sup> NSSO Round** gives estimate of reduction of CPRs. It is also assumed that same trend will be continued for the recent period also. The literature has commonly associated women's dependence on CPRs. There is a very clear gender division of labour which translates into women doing much of the w.r.t accessing CPRs. The information about women in the NSSO Report on Employment Unemployment Situation in India who have reported women as '**non-workers**' in Principal Activity Status. Even women who are workers by PAS will also be doing CPR-related activities. So, data is also restricted in this respect. This is defined by the NSSO. This information is available for two periods of time. Assuming this, we broadly might relate CPRs dependence with women's work in an attempt to see whether this work which adds to their livelihood status has shrunk as a result with the depletion of CPRs.

The recent round of NSSO of Employment Unemployment Situation in India (2009-10) has been taken and ten year gap have been maintained. It is assumed that minimum ten year gap is maintained to see the difference in the CPRs status and how the women's work dependent on it also increases, decreases or remains the same.

- Different CPRs activity such as collection of fruits, vegetables, etc, collection of fuel wood, bringing of the water from outside the household premises and any one of the activity have been done with the State Agro climatic region wise of both the rounds of NSSO.
- Again change in any of the CPR-Activity, collection of fruits, vegetables, etc, collection of fuel wood, and also bringing water from outside the household premises by the rural women from the year 1999-00 to 2009-10 have been cross tabulated with the State Agro-Climatic zones of India.



- All the activities are again cross tabulated at the State level and India level with the various socio-economic parameters such as Education level, MPCE class, land operational holdings and also various social groups of women.

Various variables are used in this study which is as follows:

- a. Sex=female
- b. Sector=rural
- c. Principal Activity Status of women involved in domestic duties as well as duties other than the domestic chores as already mentioned in the coming chapter.
- d. Women non-workers taken into study.
- e. Districts of all the states, first of all are recoded and then again created into a new variable known as Agro-Climatic Region, and again Agro-Climatic Region then created into another variable such as State Agro-Climatic Zone.
- f. Various socio-economic variables such as Education level, MPCE group, Operational land holdings and various social groups such as OBCs, SC, ST and others.

**To conduct this study on CPRs across different Agro-Climatic Zones, various methods have been used which are as follows:**

- a) To make the data comparable, i.e. 66<sup>th</sup> Round with that of the 55<sup>th</sup> Round, the districts of 66<sup>th</sup> Round were recoded into the old ones, making the 55<sup>th</sup> Round data as the base year. All the new districts created during the 66<sup>th</sup> Round & the old ones from which they were bifurcated was given the same code. All the 540 districts were recoded into 464 districts.
- b) After this, Agro-Climatic Zones were created, all the districts were converted into 15 ACZs provided by the Planning Commission of India, were put into their respective zones, eg. All the districts of J& K, H.P & the newly formed State Uttaranchal were given the same code as they all lie in the same Agro-Climatic Zone, i.e WHm and the same process were done for the other 14 zones.
- c) Again, these 15 zones were created into 41 new State Agro-Climatic Zones, already shown in the above fig. These State ACZs were created for a specific purpose, i.e the variations across different Agro-Climatic Zones can be easily observed and analysed and conclusion can be made about the study.

Extensive mapping has been done to show the difference across different Agro-climatic Zones to show the CPRs availability, its reduction and its impact on the livelihood of the women.

## **1.7 ORGANIZATION OF THE STUDY**

The present study is divided into five chapters. The 1<sup>st</sup> chapter introduces their importance of CPRs, its relevance to the poor and how the women are directly affected by the depletion of CPRs. The 2<sup>nd</sup> Chapter gives a descriptive analysis of availability & depletion of CPRs over one period of time (1998) across different Agro-Climatic Regions in India. The 3<sup>rd</sup> Chapter deals with the women's livelihood on CPRs, their CPR-dependent work change across the different State Agro-Climatic Regions in India between the two time periods, i.e 1999-2000 and 2009-10. The 4<sup>th</sup> Chapter deals with the analysis of CPR dependent work of women by socio-economic parameters across different States and also at the India level between two time periods, i.e 1999-2000 & 2009-2010. Finally, the 5<sup>th</sup> Chapter deals with the conclusions.

## **1.8 CONCEPTS & DEFINITIONS**

Many concepts and definitions have been used in this chapter for the proposed study which are as follows:

***Household-*** As per NSS definition, a group of person's normally living together and taking food from a common kitchen constitute a household. The word 'normally' means that temporary visitors are excluded but temporary stay- always is included.

***Usual principal activity status (NSSO)*** – The usual activity status relates to the activity status of a person during the reference period of **365 days** preceding the date of survey. The activity

on which a person spent relatively long time (i.e. major time criterion) during the 365 days preceding the date of survey is considered as the *usual principal activity status of the person*.

*Usual subsidiary economic activity status*- A person whose usual principal status was determined on the basis of the major time criterion could have pursued some economic activity for a shorter time throughout the reference year of **365 days** preceding the date of survey or for a minor period, which is not less than 30 days, during the reference year. The status in which such economic activity was pursued was the subsidiary economic activity status of that person **by (NSSO)**.

*Usual activity status(ps+ss ) as defined by NSSO* – The usual status, determined on the basis of the usual principal activity and usual subsidiary economic activity of a person taken together, is considered as the usual activity status of the person and is written as usual status (ps+ss). According to the usual status (ps+ss), workers are those who perform some work activity either in the principal status or the subsidiary status. Thus, a person who is not a worker in the usual principal status is considered as worker according to the usual status (ps+ss), if the person pursues some subsidiary economic activity for 30 days or more during 365 days preceding the date of survey.

*Common Property Resources (CPRs)* - Resources accessible to and collectively owned\held\managed by an identifiable community and on which no individual has exclusive property rights are called common property resources as defined by NSS.

*Accessible*- As NSS definition accessibility to a resource is determined either by legal status or by convention. If the community has a legal right of ownership or possession on the resource, it is clearly accessible to the community. Besides, such legal rights, resources for which customarily accepted user rights exist are also treated as “accessible” to the community.

*Collectively owned/held/managed* – The term “Collectively owned or held” presumes a legal status. Thus, a resource collectively owned or formally held (by legal sanction or official

assignment by a community is considered to be a common property resource by NSS definition.

**Identifiable community**- This means that co-users of the resources are a well defined group of persons. For instance, all inhabitants of a village from an identifiable community. A large census village usually comprises a number of distinct settlements. The residents of one or more such settlements, constituting only a part of the village's population, can also form a community. Apart from these, a community may be a caste- based or religion- based or occupation-based group of people or a group constituted according to the traditional social order by NSS.

**Exclusive Property Rights of individual (NSS) - Resources** owned or held by an individual or a family or an organisation like a company or corporation or co-operative are not be considered as CPRs. However, a resource held by a co- operative society constituted of persons who were co-users of the resource prior to its formation, is treated as a CPR. **For example**, all resources of co-operative societies of co-users, such as co-operative irrigation societies, farmers' co-operatives, fishermen's co-operatives, etc. are considered as CPR for this survey.

**Common village land or 'commons' (by NSSO)** –These categories of CPRs refer to common property land resources within the boundary of the village and were formally (i.e. by legal sanction or official assignment) held by village *Panchayat* community of the village. Categories of common village land are described below:

**Village panchayat grazing land/pasture land:** This is a well-defined category of land in the classification used in official land-use records. Traditionally, grazing and pasture land has been the most important constituents of CPR land. These are variously known as *gauchar*, *gochar*, *gairan*, *gomal*, etc. Villagers have user right on permanent. Village woodlots which may have come up on the grazing land/pasture land were not considered under this category.

- **Village forests and woodlot (not under Forest/Revenue Deptt.) and van panchayat forest:** Thos item include all land under village forest and woodlots. This also includes the area notified as forest within the village which may belong

to the forest department, or any other government department (like Revenue depart. or PWD.) But is formally under the management of village panchayat or a community of the village.

- **Van panchayat** forests in the hills of Uttar Pradesh which are formally managed by village communities, are, also included in this category.
- **Village sites and threshing floor:** They include village sites and all area of land which is marked for common use of the villagers for economic activities, such as (a) processing of agricultural produce, (b) storing of grains, other agricultural produce, firewood, etc., (c) use for other household enterprise.

**Government forest (defined by NSSO)** - By legal status, forests in India are classified into following three categories, viz. Reserved forest, Protected forest, and Unclassified forests. Forest land also includes all state owned area of land classed as forest under any legal enactment or administered as forest, whether or not actually under forest. However, area of land under social and farm forestry, village forests, **Van Panchayat** forests and forests owned by individual households are excluded.

- **Reserved forest:** Reserved forests are constituted under The Indian Forest Act or other forest laws of the States. The government holds absolute rights of ownership in reserved forests. The products of a reserved forest are not to be used by the local population unless specifically permitted by way of grant of privilege and not as a matter of right. Access to this forest is generally restricted. All forests declared as wildlife or game sanctuary or national parks were treated as reserved forests.
- **Protected forest:** Protected forests are also constituted under the Forest Act. The locals are permitted to gather all produce except those items which are specifically prohibited. Other privileges to the local population are also permitted. The privileges commonly enjoyed by the local population include collection of leaves, firewood, fodder and other minor forest produce, grazing of cattle, etc
- **Unclassed forests:** .According to the classification by legal status, this category includes all other forests. Some of these forests are privately owned. All village forests are included under this category. In the hill States of the North-East, forests are owned by district councils, village community and even by individual households. All these come under the category of unclassified forests. In some parts of the country, there are forests on revenue land, which are normally assigned to

the forest department for management. These are called as revenue forest or Soyam forests.

***Common water resources:*** An Indian village uses a number of water sources, usually of different types, to meet their needs. Besides, meeting needs for domestic purposes, such as drinking, bathing, washing etc., these sources provide for irrigation, feeding and washing of livestock, fishing and needs of other of other household enterprises. Many of the water sources used by the villagers are owned by individual households. **But in most of the villages, there are some sources which are meant for community use. These are either held by the village community as a whole or a caste/religion/occupation-based community or a community based on traditional social order or community of persons of a geographical location.** There are also sources of water which are either constructed by or lie within jurisdiction of a government department. All these sources, whether or not controlled by a community or a local body, which are not held by individual households, have been treated as common water resources.

***Community management of water resources:*** Management of water resources by a local body, whether formal or informal, has been referred to as community management of common water resources.

## **1.9 REVIEW OF LITERATURE**

Today, a lot of emphasis has been given to the Common Property Resources among the researchers. Though, the study of CPRs in India started during the early 1980s, a lot of work has been done on this area by many scholars but still a lot is to be done in this area, especially CPRs and its impact on the rural women, how they are important for the women and due to their depletion and degradation in quality & quantity. A lot of focus is still needed on the relationship of CPRs & women because of gender division of labour as women is engaged in all types of domestic chores and also engaged in duties other than domestic activities. Though, CPRs form an important constituent in the life of the rural people, still is neglected by the policy makers and rural development planners.

Common Property Resources (CPRs) are the resources accessible to the whole community of a village & to which no individual has exclusive property rights. For example,

in the dry regions of India, they include village pastures, community forests, wastelands, common threshing grounds, waste dumping places, watershed drainages, village ponds, tanks, rivers/rivulets, and riverbeds, etc (*Jodha, pp. 1986*). The resources that are accessible to and collectively owned/held/managed by an identifiable community and on which no individual has exclusive property rights are called common property resources. Again according to *Jodha (1989) defined* Rural Common Property Resources as resources to which all members of an identifiable community have inalienable rights. For example, in Indian Context, CPRs include common pastures, community forests, wastelands, common dumping and threshing grounds, watershed drainages, village ponds, and rivers and rivulets as well as their banks and beds. There is another name for these resources which is defined by *Kanchan & Chopra (March 2002)* also known as the Common Pool resources. In the Indian Context, Common Pool Resources are non-exclusive resources to which the rights of the uses are distributed among a number of owners. These co-owners are generally defined by their members or some other group such as village or a tribe or a particular community. To access these resources there are set of rights which are defined in terms of different resources which are also known as **property rights**.

CPRs, though neglected by policymakers & planners, play a significant role in the life of the rural poor. But despite CPRs contribute in sustaining livelihood of the poor, the area of the CPR has declined by 26 to 63% during the last three decades. *Humphires (1990)* – forests & village commons have been important **source** of supplementary livelihoods & also basic necessities for rural households in many parts of the world (include Europe in the 18<sup>th</sup> & early 19<sup>th</sup> centuries). These common pool resources provides firewood, fodder, small timber & various non-timber products. These resources are very important for the poor people; especially for the poor women who own little private land & have contributed critically to survival.

*Jodha, Agarwal, Beck & Ghosh, Pasha, Chen, Blaike et.al, Gupta and many other scholars have highlighted the importance of CPRs to the rural poor and also their contribution to the rural economy.*

CPRs act as a cushion during the crisis situation, non-crop season or drought period, is greater for the poor households, as unlike the rich, they do not have many other adjustment mechanisms( *Jodha,1986*) They are not only a source of physical supplies for the rural poor. CPRs also greatly contribute to employment & income of the rural people. CPRs often helped

generate multiple earning options & the flexibility required by farmers to adjust their farming systems to variable agro climatic conditions. **Jodha** during her field visits in the semi-arid regions of India is of the view that the semi-arid regions of India, the landless & land poor procured over 90% of their firewood & satisfied 69-89% of their grazing needs from the commons. **Agarwal (1987)** emphasised on the rural domestic energy, which is generated by the fuel wood collected by the poor women. Agarwal, envisaged that firewood alone provide 65-67% of total domestic energy in the hills and desert areas of India & over 90% in Nepal as a whole. **Chen (1991)**, also in her case study of a Gujarat village highlights the central role of CPR that plays in the sustainable livelihood strategies of poor households. She also notes that *“virtually all households supplement their primary & secondary occupations with a significant daily volume of routine, primarily subsistence- oriented activities, especially, the gathering & collection of fuel, fodder & water generally carried out by women”*(pp.111). CPRs also provide substantial benefits during the lean season (**Beck & Ghosh, 2000; Jodha, 1986**). **Tony Beck (2001)**, while conducting his study on CPRs in India came to a conclusion that (a) CPRs are vital resources for the poor. CPRs are particularly important to the poor in the lieu or the pre-harvest season, in other times of stress, when other sources of income are not available. (b) Women, particularly, involved in accessing & using CPRs, but not often in management. (c) CPRs have greater importance to the poor, than the rich, in that they usually make up a larger share of poor people’s income; (d) Poor people are being excluded from their livelihood resources by privatisation and commercialization. The CPRs contribute to employment, income and asset accumulation. They are an important component of people’s self-provisioning systems (**Jodha quoted Blaikeet.al, 1985; Gupta, 1985**) Owing to their degradation and low productivity, the CPRs do not offer high returns to their users. The rural, which have very few alternative sources of income, depend more on the low pay off options offered by CPRs. The rural rich, i.e. big landholders, depend very little on CPRs. It is the poor, who have no option rather than to depend on CPRs.

Though women spend a lot of time on the domestic duties which became a part of invisible work which is never counted they spend most of their time on doing these duties, and are left with no time to take care of themselves. Men contribute 60% of the work but inspite of these contributions in the economy; there work goes on unnoticed by **Asha Kapur Mehta (Nov, 2000)**.



There is a relation between poor women & men and also CPRs. The access to and use of CPRs by the poor can be considered an indigenous system which works through unequal power structures to provide significant benefits to the poor. This literature has dealt on coping adaptive strategies of rural people & sustainable livelihoods which provide a strong conceptual framework for the focus on CPR use. It also explores indigenous systems that promote a better quality of life for the poor, and in some cases examines policy options for working with, or building upon these indigenous systems by **Beck & Cathy Smith in their paper “Building on Poor People’s Capacities: The Case of Common Property Resources in India & West Africa” (2001).**

The CPRs play very important role in the life and economy of the rural people, but if it continues depleting and degrading with the same pace it is going to affect the livelihood of the rural people to a great extent. It is also evident during the field surveys conducted by **Jodha (1989)**; she found that CPR income accounts for 14 to 23% of household income from all other sources in the study village. Though, CPRs valuable contribution to the economy of the rural people, it is one of the most neglected areas in development planning in the country. They have declined both in terms of area & in terms of physical degradation. **(1990)** highlighted that CPRs are steadily declining in extent, and in quality, a point that is important for the sustainability of CPR dependent livelihoods and the natural resources themselves **Chopra, et. al 1990; Chopra and Dasgupta, 2002** .It should also be noted that not only the poor are benefitted from the CPRs the but rural rich also gets the benefit. The poor gets the benefits of these CPRs in ‘**relative terms**’ whereas the rich got the same in terms of ‘**absolute terms**’ as it is just contrary to **Jodha’s work (1986) (Nadkarni et.al 1989; Pasha1992; Singh et al.1996).**

Though, CPRs provide benefits to the poor, yet it is fast declining in the present times. One of the important reasons for their depletion is “Privatisation” done in order to benefit the rural poor but the result was just the opposite. **(Jodha, 1989)**. The rapid population increase in developing countries increase pressure on land which leads to over exploitation & degradation of the natural resource base agriculture. According to Jodha(1986, 1990), the extent of CPR land in 82 study villages declined by between 26% & 52% mainly because of privatisation through land reform, the number of products drastically decreased, & the time

involved in collection increased. *Ghosh (1998, p.65)*, in his seven village study of West Bengal also found the similar results that the area & status of CPRs has declined over the previous 50 years and rights of common people to these resources has been gradually reduced. During the field visits of 14 villages of Karnataka *Pasha (1992)* found a steady decline in CPRs from about 36% to 24% of the total geographical area of the village over about the last 20 years, due to encroachment of the rich & government schemes such as tree plantations. Similarly, *Sudarshan Iyengar (1989)* conducted field survey on the problems of *CPRLs in Gujarat* and he has also found that the infrastructural development has opened up the new markets for natural resources but this has also led to the over-exploitation of the resources due to the increase of pressure of population on land resources and has further led to the degradation not only in quality but also in quantity.

Factors **responsible for the depletion of CPRs cited by Jodha** (1) Demographic factors (2) Market factors (3) Technological factors, and (4) Public interventions. Many other scholars like Pasha, Ghosh have also talked about the factors responsible for depletion of CPRs. S

Rani Tyagi in her study “Role of Mountain Women in Environment Governance in India” has also highlighted the constraints faced by the mountain women. As women is known as the backbone of the mountain economy of the & she is the main subsistence provider in the hills. Due to depletion of forests, she has to walk 8-10 kms everyday in order to fetch fuel, fodder, water and minor forests produce also etc. *Agarwal, Aasha Kapur Mehta, (Nagbrahmam & Sambrani; 1983)* and many others have also focused this issue of women. And if her distance is to be calculated, covered by her in a year, we will find that she covers 3000 to 4000 kms distance. Women particularly in living areas have also highlighted the special relationship of nature with the women also highlighted by *Vandana Shiva*. Major Eco-feminists scholars such as *James Browyn, Shiva, Agarwal and Cecile Jackson (1993)* is of the opinion that women interact with the environment in a spiritual, nurturing & in an intuitive manner. *Joan Davidson (Feb, 1993)* is of the same opinion that women are directly related to the environment. She has also talked about the types of work performed by women and also says that women play a very crucial role in managing and conserving the natural resources.

There have been conflicts over forests resources in India which are mainly the product of the opposing demands on these resources. They are generated by the requirements of conservation and the needs to satisfy the basic necessities of the marginalized people. During the past century there has been a progressive encroachment by the State on the rights & privileges of the people to forest resources. People have restricted this encroachment in various parts of India mainly through the Gandhian non-cooperation method of protest well known as the “**Forests Satyagraha**”. The role of women is important in the conservation of forests as it is evident from the struggle of women in the hill state of U.P (now Uttaranchal) as started a movement initiated by many ecofeminists and also many activists like Sunderlal Bahuguna, Ecofeminists Vandana Shiva in and the local women against the cutting of the trees. They hugged the trees and prevented it from the cutting and their movement against this struggle was a huge success and this famous movement was called as **Chipko Movement**. So, it is clear that it was the effort of the women who were able to save the trees.

*Bina Agarwal (2001)* has highlighted the importance of institutions which has been of general consensus that people’s involvement is required not only at the individual level but also collectively such as at the village community. And this can be very affective in the context of management of natural resources. This method is also now, adopted by several International Institutions and various NGOs. Though, there is an affective participation, but still women are **excluded from this participation**. And, if included also, it won’t bring much benefit to them as they do not have the bargaining power as talked by the author. For eg, women were largely ignored by the Common Forestry Groups. During the field visits conducted by the author, it was found that women were excluded from the participation process during the formation of the Common Forestry Groups and women were quite neglected on this part. The author has also talked about the gender relations between men and women and about their intra-household dynamics. The author is likely of the view that there are going to effect the gender differences in the intra-households bargaining power in relation to subsistence and special importance of command over land in agrarian economies. She has also talked about the importance of *collective bargain and collective action*.

*Robert Wade (1987)* has also highlighted the importance of collective action that how affective through the collective action, the natural resources or common property resources can be managed effectively. He has also talked about the Common-pool resources are to be understood as a sub-set of public goods (as that term is used in economics). All public goods have the property that many can use them at the same time, because exclusion is difficult. Some public goods infinite benefits but at the same time not all the public goods yield the same result. For, eg .Common-pool resources, by contrast, are public goods with finite or subtractive benefits; if A uses more, less remains for others. Common-pool resources are therefore potentially subject to congestion, depletion, or degradation, i.e. using which is pushed beyond the limits of sustainable yields (*Blomquist and Ostrom, 1985; Randall, 1983*) as referred by Wade.

In order to avert the crisis situation created by the depletion of forests (deforestation) joint management of forests was started 10 years back an initiative started by the Ministry of Forests & Environment to save the depletion of forests (*Jodha,2000*). Lot of studies have been conducted on CPRLs but Common Property Water Resources is also needed to be paid great attention. This is not sufficient unless women are studied as it is clearly evident from the above literature that women are directly related to nature and they help in the conservation and preservation of the natural resources. Therefore, more attention is to be paid on the gender issue because it is the women who perform all the household tasks as a result of gender division of labour.

## CHAPTER-2

### AVAILABILITY & DEPLETION OF COMMON PROPERTY RESOURCES: AN ANALYSIS BY STATE AGRO-CLIMATIC REGIONS

**2.1** This chapter deals with the CPRs, its relevance in the life and economy of the rural population in India. This chapter is mainly based on the report of NSSO (54<sup>th</sup> ROUND). It mainly highlights the importance of CPRs to rural poor, how it helps in sustaining the livelihood of the rural poor. CPRs include all such resources that are meant for common use of the villagers. CPRs include all resources like village pastures and grazing grounds, village forests and woodlots, protected and unclassed government forests, waste land, common threshing grounds, watershed drainage, ponds and tanks, rivers, rivulets, water reservoirs, canals and irrigation channels. Common Property Resources (CPRs) - defined as resources accessible to and collectively owned/held/managed by an identifiable community on and which no individual has exclusive property rights are called common property resources (NSSO- 54<sup>th</sup> Round, 1998).

The beginning of studies of CPRs in India can be traced back to early 1980s. This chapter mostly deal with the nature and extent of dependence of the rural poor on the CPRs for their bio-mass needs, depletion and degradation of the CPRs and the existing systems of community management of these resources.

### **2.2 UTILITY OF CPRs-**

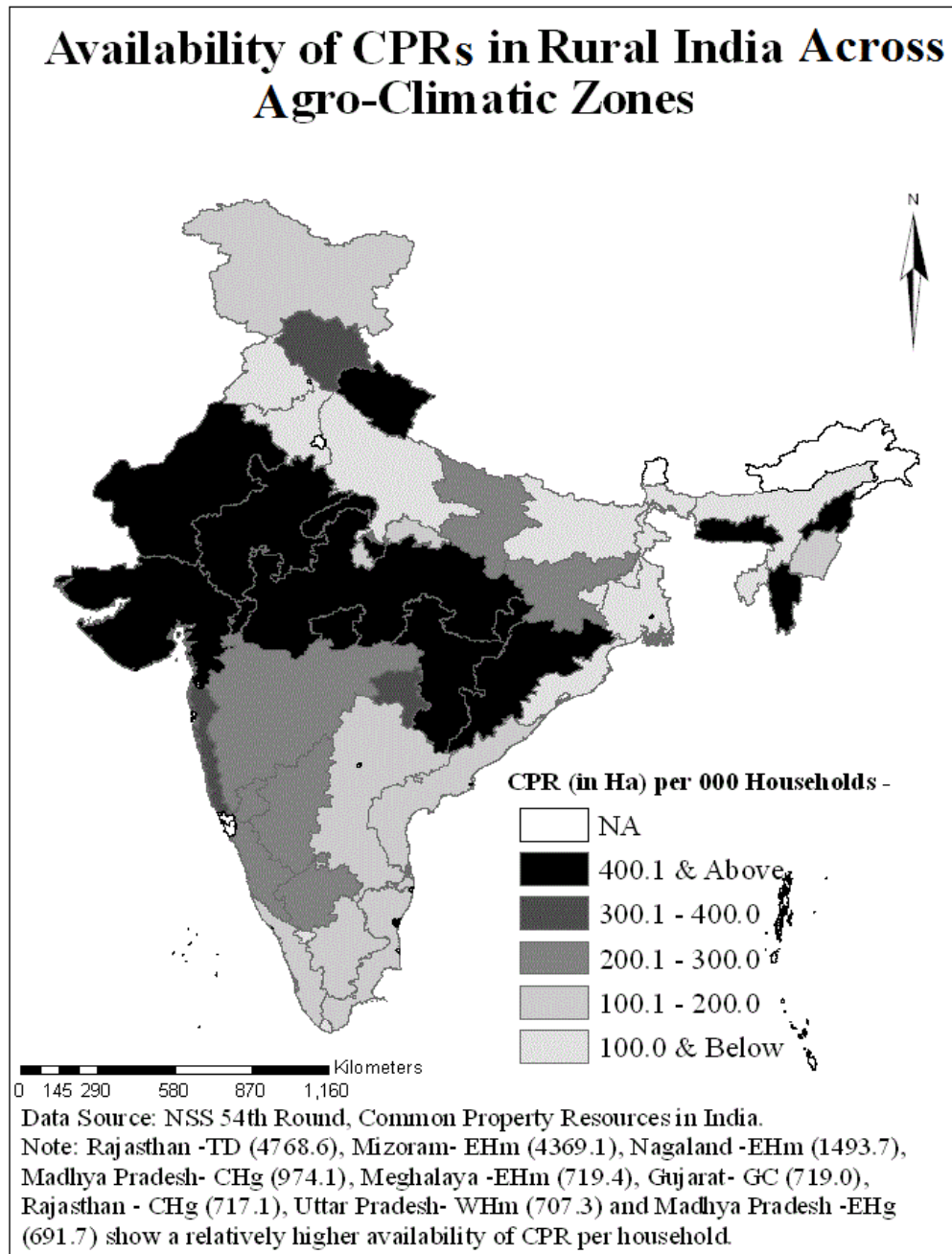
CPRs contribute to employment, income and asset accumulation. They are an important component of people's self-provisioning systems. Owing to their degradation and low productivity, the CPRs do not offer high returns to their users. The rural who have very few alternative sources of income, depend more on pay off options offered by CPRs. The rural rich, i.e., the landholders, depend very little on CPRs. It is the poor, who have no option rather than to depend on CPRs-**Jodha referred (Blaike et.al., 1985; Gupta, 1985).**

During the field surveys conducted by **Jodha (1989)**, she found CPR income accounts for **(14 to 23) %** of household income from all other sources in the study village. Though CPRs valuable contribution to the economy of the rural people, it is one of the most neglected areas

in development planning in the country. They have declined both in terms of area & in terms of area & also in terms of physical degradation.

**2.3** This section deals with availability of CPRs (ha) per thousand households across different Agro-Climatic Regions.

**Fig.2.3 (a)**



CPRs (ha) availability per 000 households is the highest in the State Agro-Climatic Zones like *WHm region of Uttaranchal, North Eastern States of EHm region like Meghalaya, Nagaland and Mizoram, Dry region (TD) and CHg regions of Rajasthan, Gujarat (GC), all the three regions of Madhya Pradesh (i.e CHg, EHg of Chhattisgarh-former M.P and WHg) and EHg region of Orissa.* It lies between 400.01 & Above/000 hhs.<sup>1</sup>

While the lowest CPR availability (ha)/00 hhs is 100.0(ha) and below and are in the regions like the Upper Gangetic Plains of Punjab & Haryana, TG of Uttar Pradesh, Middle Gangetic Plains of Bihar, all the three regions of W.B, EHm regions of Assam, Tripura and, Eastern Plains & Hill Region of Orissa, both the regions of Andhra Pradesh, and all the three regions of Tamil Nadu & Kerala. There can be various reasons for this varied distribution. While the WHm region of Himachal Pradesh, West Coast and EHg region of Maharashtra have the 2<sup>nd</sup> highest category of CPRs (ha)/00 hhs ranging from 300.1 to 400 ha. All the three regions of Karnataka and WHg region of Maharashtra comes under the medium category, i.e neither too high nor too low availability of CPRs. The figure shows lot of variations across the various State Agro-Climatic Zones.

#### **2.4 THE DISTRIBUTION OF CPR-RELATED MINOR FOREST PRODUCTS & ITS AVAILABILITY ACROSS DIFFERENT AGRO-CLIMATIC ZONES**

Common Property Resources can affect directly to the poor people, that is why it is important to explain how much the use and share in this common property resources varies across the regions of India. Among all fuel is the largest consuming common property resource and other are also having significant proportion, but it also varies with the regions of India. The region having more dependency on these resources needed to evaluate if these consumption is affecting the poor of this is a resource rich region and profit goes to the rich people's hand only.

Households consuming fuel wood are in largest number among the all common property resources consumption. In case of the household consuming fuel wood in the states of India it is not available in all the states, that is why only the regions having more forest Himalaya (covering **Jammu & Kashmir, Punjab, Uttarakhand, Sikkim and all north eastern states.**

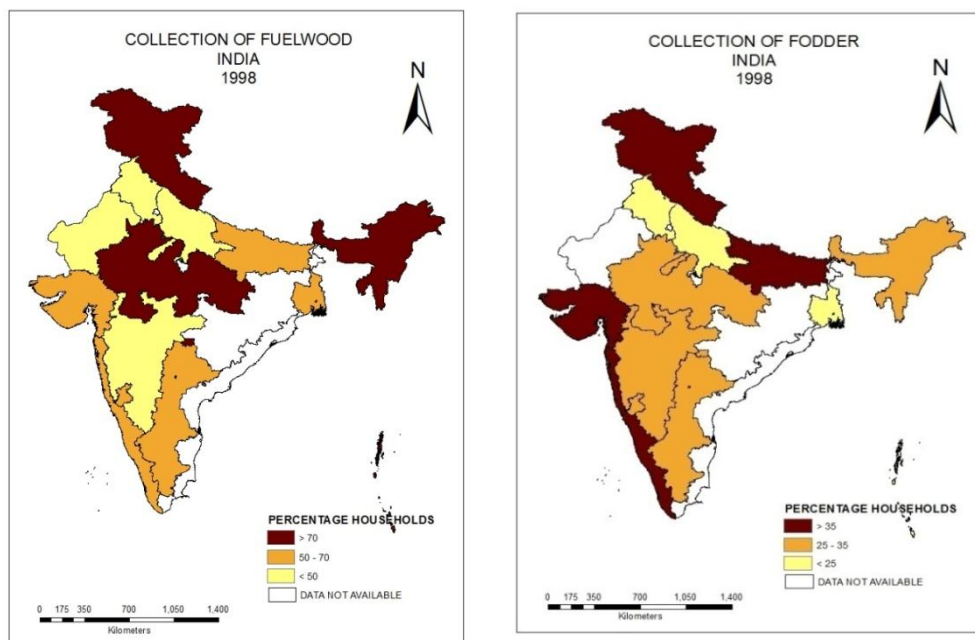
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<sup>1</sup>See definition of hh in the Introductory Chapter.

The other region is the central most part of Indian subcontinent Madhya Pradesh. The lowest consumption is in the states like Rajasthan, Haryana, parts of Uttar Pradesh and Maharashtra. In case of Fodder also it also increases with the availability of fodder in the states of northern India and parts of Western Ghats, where there is also highest amount of consuming fodder households in Gujarat and Bihar and parts of Uttarpradesh where it signifies a significant number of the households dependent on livestock, who can't afford to buy fodder separately. The regions surrounding Delhi, Haryana and West Bengal having the lowest collection of fodder that implies the unavailability of fodder to the poor in those states.

Figure 2.4 (a)

figure 2.4 (b)



In collecting Timber also the concentration lies in the central part of India and Northern part, where most of the forest resources are available that influence the availability in overall with influencing the poorest household also a little bit. It is important to notice here the regions just surrounding higher concentration having the lowest percentage of household consuming timber. In case of Kendu leaves the central hilly region consuming at the highest percentage, where it is also available in the surrounding regions but North Eastern Region is having the lowest concentration, where forest based resources are the main to consume at a larger scale.



Fig 2.4 (c)

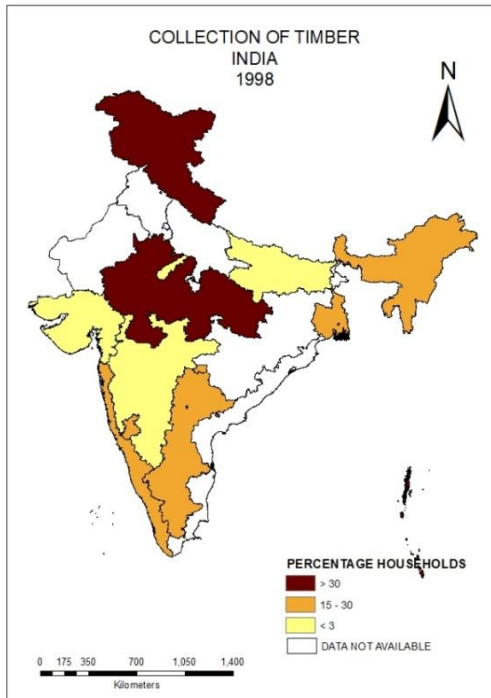
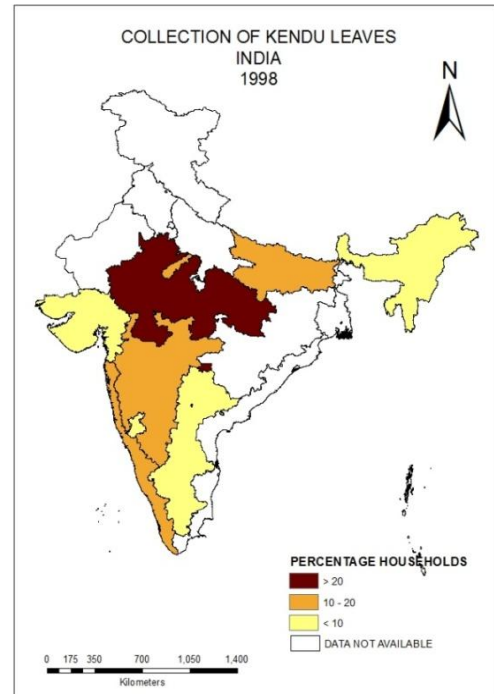


Fig.2.4 (d)



Collection of Medicinal plants also very high in the hilly region but in the northern region it is lowest where in the north-eastern, central hilly region and parts of Western Ghats percentage of household consuming medicinal plants is highest. Himalaya is the largest source of medicinal plants in this world. It signifies that the other forested regions though can have the availability of the medicinal plants but the accessibility is concentrated in some region. Fruits collection as a Common Property Resources is again concentrated in the Central Hilly Part and North-Eastern Region. Some parts Western Ghats with high concentration and overall south India has moderate collection of fruits. But Northern India and Jammu Kashmir the Northern Himalayan parts is having the lowest collection with lowest percentage of household can collect this common property resource.

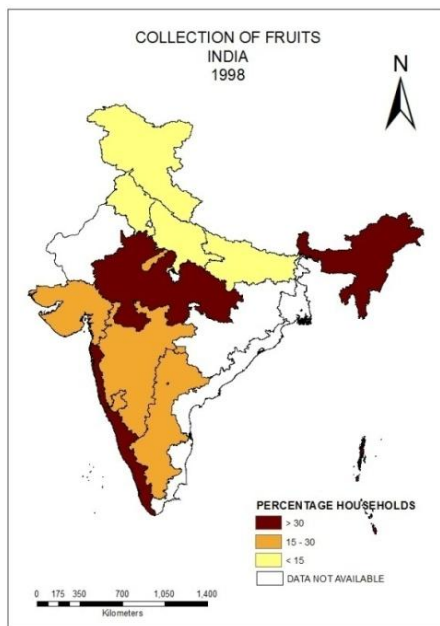


Fig.2.4 (e)

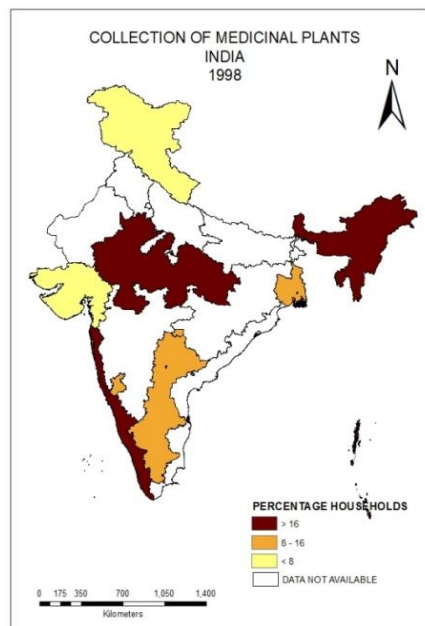
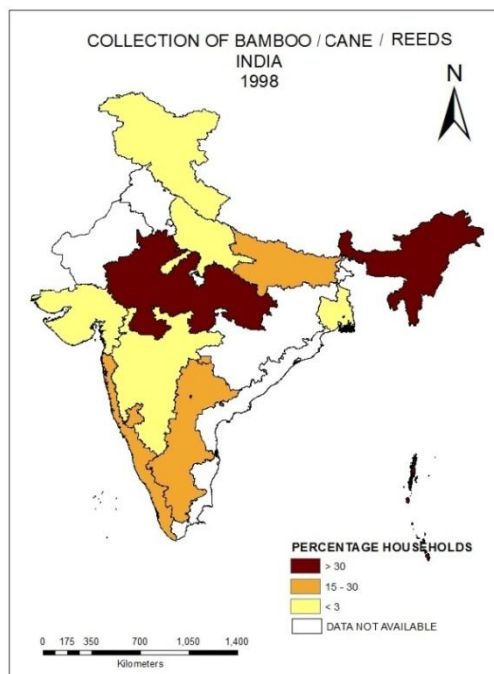


Fig2.4(f)

Fig.2.4 (g)



Bamboo/Cane/Reeds is the basic material that can be use for poor house making and small home based industries, that can be the bases where poor are collecting more from nature and forested track. In the Central Part of India the consumption is more that households collecting this resource more dependent may be they are engaged to a small house based industries. Thatched material also from common property resources signifies that portion of our society who can't afford costly thatched material from market. Thatched material collection is also highest in the central part and other region having a minimum percentage of households collecting thatched material. In case of Edible Oil the concentration lastly again lies in the Central most part of India where most of the common property resources are available. South India is not having the access to those resources, though Bihar and parts of Gujarat have a minimum percentage of household collecting edible oil from common property resources.

Fig 2.4 (h)

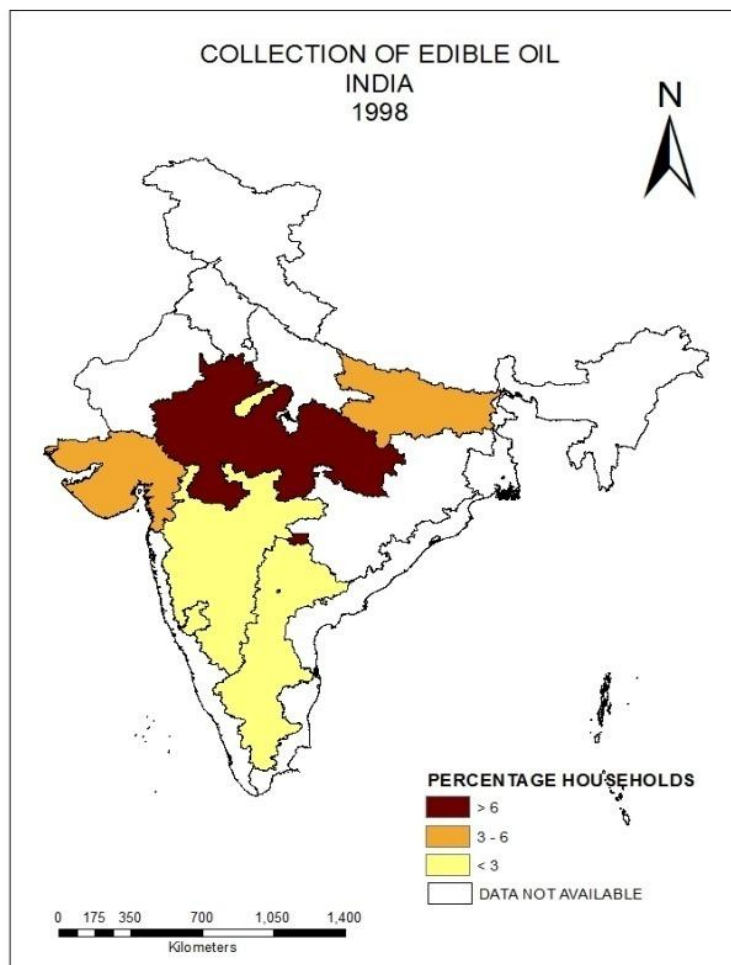
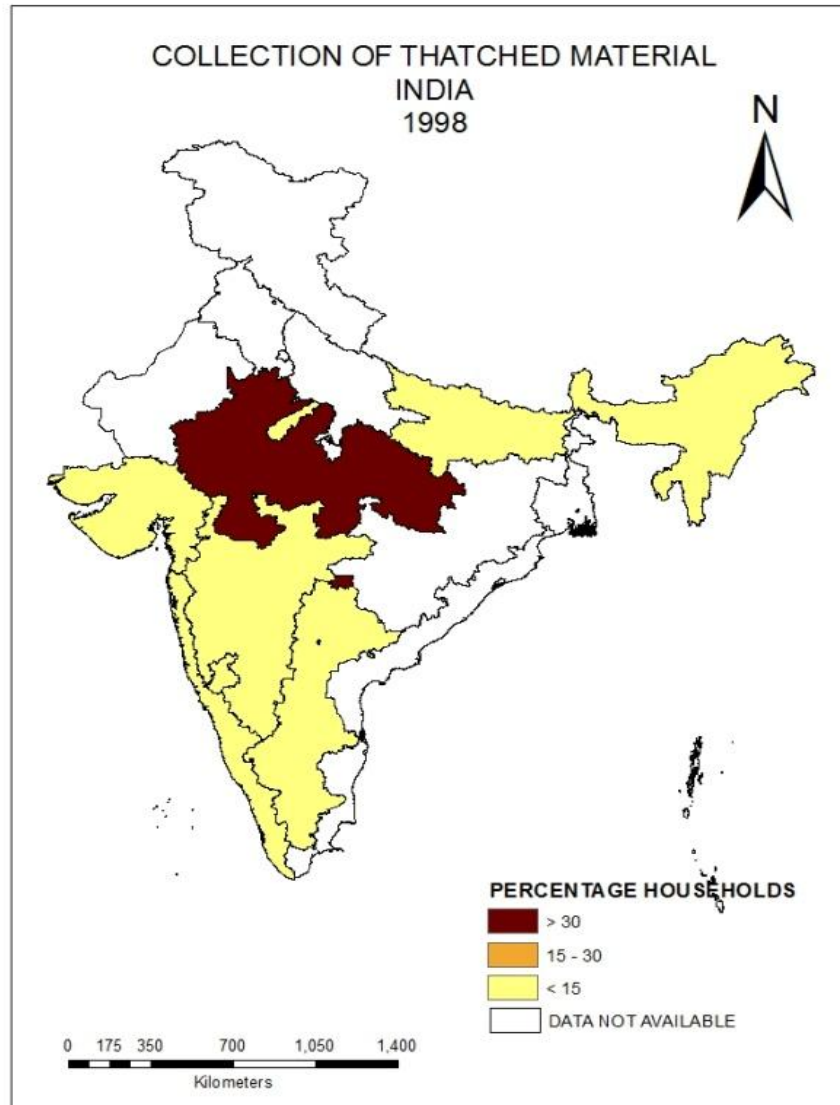


Fig 2.4 (i)



Source: For the above figures, i.e 2.4 (a), (b), (c), (d),(e),(f), (g), (h), (i) respectively all have the same source, i.e NSS, Report No.452 on CPRs in India (1998).

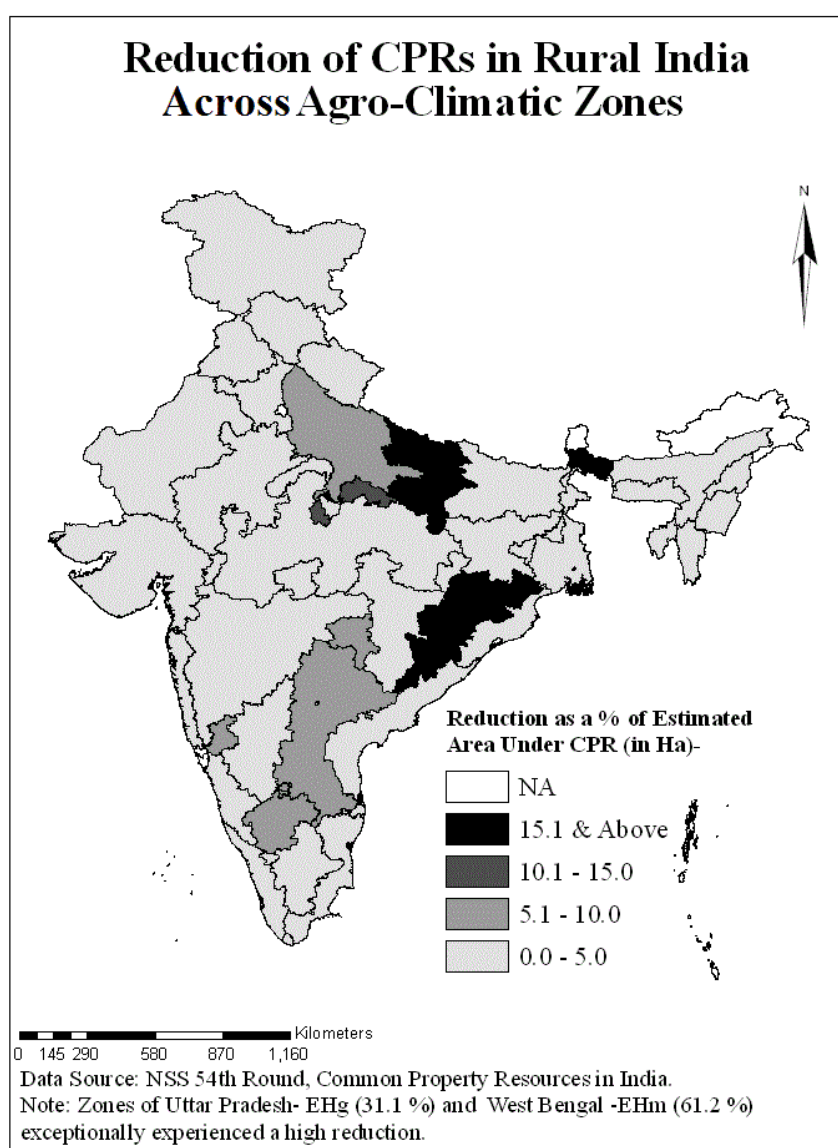
The collection of bamboo/cane/reeds is the highest among the CHg regions of Rajasthan and M.P and the entire region of Eastern Himalayan Region. Whereas the collection of thatched materials are the more prominent CPR products in the CHg regions of Madhya Pradesh and

Rajasthan. The collection of edible oilseeds is more a CPR product and these are the highest in the CHg regions of Rajasthan and Madhya Pradesh.

## 2.5 Reduction of CPRs across Different Agro-Climatic Regions

From the figure 2.3, it can be clearly seen that CPR reduction to the estimated area is the **highest in the regions like Middle Gangetic Plains of Uttar Pradesh, EHm region of West Bengal and EHg region of Orissa** while the least reduction of CPRs (ha) as a % of estimated area is observed in the majority of the regions as it

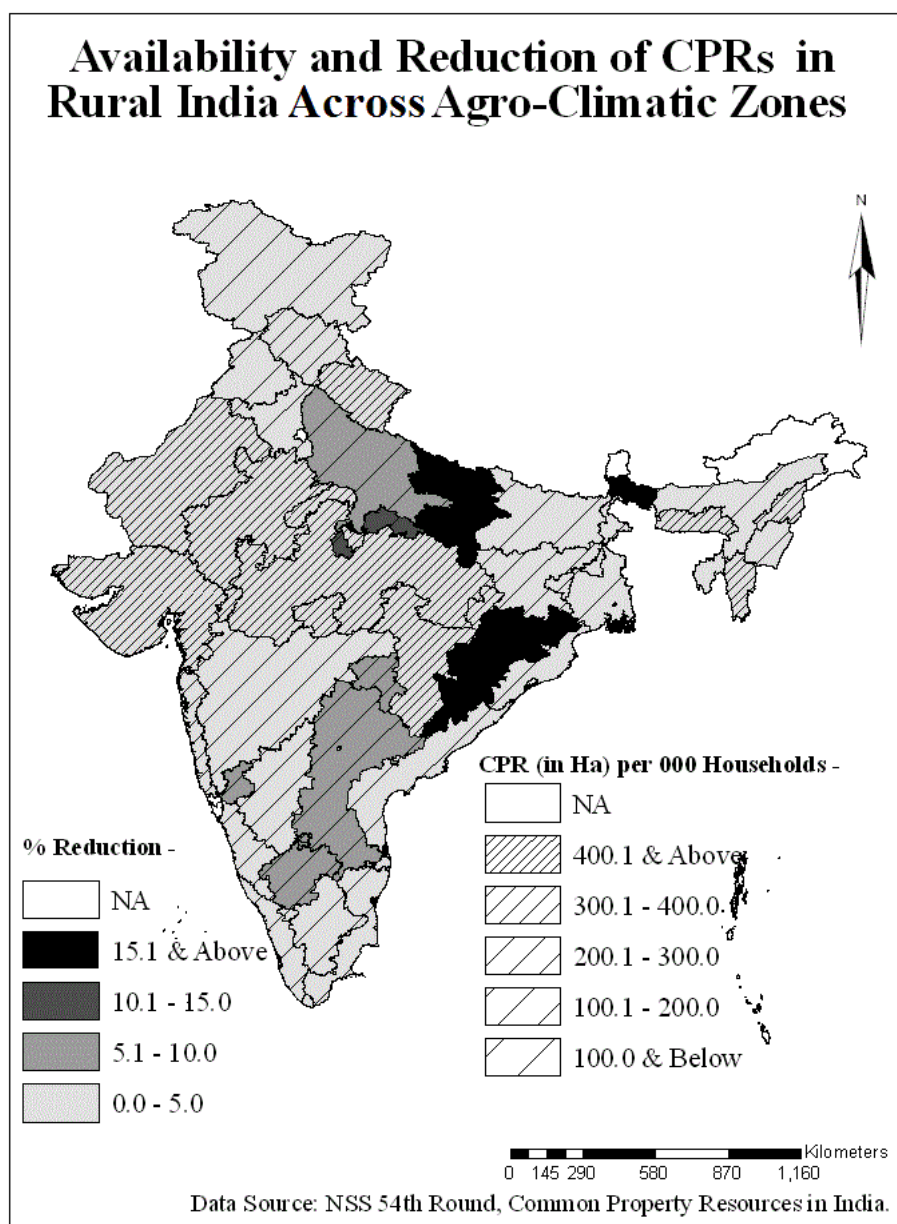
Figure 2.5



is clearly visible from the above figure. The Trans-Gangetic Plains of Uttar Pradesh, WHg region of Karnataka, EHg region of Maharashtra and DP region of Andhra Pradesh comes under the 2<sup>nd</sup> least category to report the CPR reduction in ha. **2.6** This part of the chapter deals with the comparison and Reduction & Availability of CPRs across different Agro-Climatic Zones in Rural India. Also to find out that whether the reduction is taking place in the same area where there is scarcity of resources?

## 2.6 Comparing Availability & Reduction of CPRs across Different Agro-Climatic Zones in Rural India.

Fig. 2.6



From the above figure, it is clear that the reduction of CPRs is the highest in the areas where there is the least availability of CPRs which is a very serious concern for those areas. Reduction is taking place in the same areas where there is scarcity of resources. These are the areas: Middle Gangetic Plain areas and CHg regions of Uttar Pradesh, Eastern Coast & Hills of Orissa and also the EHm zone of West Bengal, the depletion is very fast and this is a serious concern for all of suit means that there is more dependence on CPRs in these areas in spite of the availability & reduction of these resources at a very fast rate. These are the **‘problem areas’**.

Where there is the highest availability of CPRs, the reduction rate is rather slow, means that the socio-economic conditions of these areas are far much better as the dependence on these resources in areas are less as compared to the problem areas. These are the regions of Madhya Pradesh (all the three regions) Rajasthan (TD ,CHg) and Gujarat (GC), WHm of Uttaranchal and also some of the regions of the Eastern Himalayan Zones like Meghalaya, Nagaland and Mizoram respectively. **It is observed that where there is less availability of resources there is less reduction as compared to the above ‘problem regions’**.

## **2.7 CONCLUSION**

The above section has studied about the Availability and depletion of CPRs for one time of period and it has clearly shown the status of CPRs availability and its reduction over a period of time in Rural India over a period of time. The importance of CPRs are also discussed and its relevance is established among the rural people of India CPRs based products have also been studied various Agro-Climatic Zones in India and it was also established that which CPR based products such as timber, kendu leaves, fuel wood, firewood, fruits .etc are more important in one region and less important in the other region. The Availability and reduction have been shown for over one period of time and at the same CPR availability are analysed and CPR reduced for over the same period and tries to analyse the pace of the reduction rate with that of the availability.



# CHAPTER-3

## 3.1 CPRs AND WOMEN'S LIVELIHOOD

This chapter deals with the issue of CPRs and women's livelihood in Rural India. There has been a main focus on the women dependence on CPRs that with the depletion of CPRs, how are they going to affect them the most, what are the CPR work that they are doing and also to study about the changes taken place during the two time periods<sup>2</sup>. The availability of different CPRs across different State Agro-Climatic Regions and also its reduction has been already discussed. What are the regions that are the most affected by the depletion of CPRs and what are the reasons for this depletion. CPRs are very important for the survival of poor and the Marginalised one, especially the rural poor women.

## 3.2 Importance of CPRs to the rural women; A View from literature

The importance of CPRs to the rural poor & its contribution to the rural economy has already been discussed in the Introductory Chapter but still more emphasis is to be given to the relationship of CPRs & the Rural Poor Women. It is the gender division of labour that women are primarily involved in the domestic activities and the also the activities related to the CPRs. The gender division of labour creates much drudgery to the rural women (**Samal & Dhyani, 2007**).

- Due to gender-division of work, it is well established fact that it is the women's work who protect and conserve the nature's life in agriculture and forestry, these conservation work, through ensuring the provision of food and water, also the destruction of the forests and other natural ecosystems are most widely experienced by the these rural women (**Vandana Shiva,**).
- Forests are the basis for the livelihood and survival; they are dependent on forests for meeting their day-to day requirements for food, fruit, fuel wood and fibres. Not only this, forests are also important source of leaves, seeds, gums, waxes, dyes, resins,

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<sup>2</sup>Here, period refers to the two time periods, i.e 1999-2000 & 2009-2010.

bamboo canes, bhabbar grass, etc. which are also known as ‘**minor forests produce**’ which are not only of commercial value but also provide support for the poor and the marginalised under the difficult economic conditions (Dolly Arora, March 1994).

- The variations in the % of CPRs dependent activities, still they form an important constituent for the sustaining the livelihood of the rural poor women.
- Collection of fuel, firewood, bringing water from outside the household premises, is , though, very exhaustive for the women, yet they are the important source of livelihood for not only them but also their family.

The present section deals with the analysis of work pattern of women relating to CPRs and the other domestic activities. A lot of literature has discussed about the women’s work pattern of women in rural economy of India, their importance and contribution to their family as well as their society but in lot of literature, the importance and role of women in the hilly regions have been highlighted.

Though, men and women are directly related to the environment but women share a special relationship with the nature as they more caring and altruistic about their nature (**Vandana Shiva, 1998**). According to her, women are considered to be an intimate part of nature both in imagination and both in practice. Women, not only merely produce life, biologically but also provide sustenance socially. The ecological societies of forests people and peasants organise their life on the Principle of Sustainability also follow the ‘**Principle of Feminism**’. Woman folk play a very important role in the Central Himalaya, as they form an integrated part of the hill society and the forests & livestock are totally dependent on the women’s effort. They play a very critical role in the use, conservation of forests, managing livestock and agriculture and also help in conserving these resources which also help in improving their quality of life for them as well as for the whole society. After analysing work pattern of women in their everyday life, it has been found that **60% of work has been allocated for outdoor activities**, that include agricultural work, tending of cattle, collection of fuel, fodder and water; about 30% of work of the indoor activities include cooking, looking after the children and the old and other household chores, and the rest time is spend on socio-cultural & recreational activities (**Samal, 2002**).

It has been established by lot of literature that “women play a very important role in the management in agriculture and resource, women also take the responsibility for food

processing, cooking, carrying water and child care” (S.J Halvorson has quoted Byers and Sanju 1994, 219). There are lot of literature which also discussed about the role of rural women’s in rural economy. From the above literature, it is clearly evident that due to gender division of labour, rural women are involved in CPR-related activities such as collecting of major and minor products from the forests, such as collection of fish, fruits, firewood collection and also involved in bringing water from the household premises.

The two Rounds of Empolyment-unempolyment Situation have been taken into consideration for the analysis of levels and change in CPR dependence (year: 1999-00 and 2009-10). For assessing CPR status and reduction in a region, the NSSO Report on CPRs (NSSO 54<sup>th</sup> Round) has been used. This is only available for **only one time-period (1998)**. For this analysis only women who have reported their PAS<sup>3</sup> as being defined as ‘**non-workers**’ have been considered.

### **3.3 LEVEL OF CPR DEPENDENCE ACROSS AGROCLIMATIC REGIONS (2009-10)**

This section, has tried to analyse the CPR related activities of the most recent times, i.e 2009-2010 and also tried to link up these CPR based activities with the resources available and tried to assess as to whether the development issue is mainly responsible for this depletion, and does the development have the inverse relationship with the access to resources.

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<sup>3</sup>PAS- PRINCIPAL ACTIVITY STATUS of women under the code 92 & 93 by the NSSO. 92 code- women involved in domestic activities.

93 Code- Women involved in activities other than domestic duties such as collection of (fish, fruits, vegetables, firewood collection and also bringing water from outside the household premises).

Table 3.3.1 compares the CPR availability in a region and the dependence on CPR related activities by women involved in domestic activities

2009-10					
State Agro-Climatic Regions	Availability of CPR/000 hh (Ha)	Firewood (%)	Collection of fish, fruits, etc (%)	Bringing water from outside household premises (%)	Any of the CPR Activity (%)
ANDHRA PRADESH (DP)	198.4	23.2	5.5	31.0	40.1
ANDHRA PRADESH (EG)	142.9	27.2	4.8	46.8	57.0
ASSAM (EHm)	45.9	58.9	56.3	19.8	72.8
BIHAR (MG)	42.3	36.3	17.3	13.7	42.9
JHARKHAND (EHg)- FORMER BIHAR	237.4	76.7	40.9	54.6	85.6
GUJARAT (GC)	719.0	53.8	16.3	36.5	66.5
HARYANA (UG)	48.1	44.6	13.0	22.6	53.9
HIMACHAL PRADESH (WHm)	332.9	57.5	26.2	39.8	68.1
JAMMU & KASHMIR (WHm)	143.3	47.1	18.7	49.6	63.1
KARNATAKA (WHg)	281.8	23.1	6.6	42.5	53.6
KARNATAKA (DP)	233.1	23.3	7.2	35.4	48.4
KARNATAKA (WC)	218.2	26.7	6.2	11.2	35.7
KERALA (WC)	118.7	23.0	2.0	13.2	31.6
MADHYA PRADESH (CHg)	974.1	47.5	15.3	59.6	71.6
MADHYA PRADESH (EHg)	691.7	54.4	31.6	44.9	72.0
MADHYA PRADESH (WHg)	421.7	54.8	10.5	60.8	76.3
MAHARASHTRA (EHg)	309.1	11.5	0.0	74.9	75.9
MAHARASHTRA (WHg)	295.3	25.9	4.4	25.7	45.0
MAHARASHTRA (WC)	309.0	51.9	9.0	49.1	70.3
MANIPUR (EHm)	171.7	36.0	43.6	57.5	69.5
MEGHALAYA (EHm)	719.4	67.3	57.9	70.2	87.7
MIZORAM (EHm)	4369.1	61.4	57.7	87.4	94.1
NAGALAND (EHm)	1493.7	62.5	67.8	42.0	79.4
ORISSA (EHg)	409.7	57.3	44.2	82.1	90.8
ORISSA (EG)	89.2	33.2	23.2	56.4	64.8
PUNJAB (UG)	17.5	18.6	5.0	2.7	21.2
RAJASTHAN (CHg)	717.1	65.2	13.9	65.3	82.3
RAJASTHAN (TD)	4768.6	56.9	13.0	40.8	67.6
TAMIL NADU (DP)	120.1	39.6	4.3	44.8	59.6
TAMIL NADU (EG)	197.8	27.5	5.0	27.6	43.2
TAMIL NADU (WC)	30.6	10.3	0.4	35.5	36.8
TRIPURA (EHm)	13.7	39.1	29.1	56.4	64.3

<b>UTTARAKHAND (former U.P)- WHM</b>	<b>707.3</b>	64.5	52.4	32.6	77.0
<b>UTTAR PRADESH (MG)</b>	101.5	33.8	8.1	23.4	46.6
<b>UTTAR PRADESH (T.G)</b>	66.4	37.5	13.9	26.7	48.8
<b>UTTAR PRADESH (CHg)</b>	206.2	63.5	51.5	70.4	76.5
<b>WEST BENGAL (EHm)</b>	<b>8.5</b>	66.9	47.9	49.3	74.9
<b>WEST BENGAL (LG)</b>	<b>20.1</b>	58.4	35.4	73.1	83.3
<b>WEST BENGAL (EHg)</b>	<b>68.8</b>	72.2	56.7	52.5	86.0
<b>Islands and UTs</b>	311.6	42.4	18.8	36.7	57.9

Source: Computed from NSS 66<sup>th</sup> Round, 2009-2010.

A spatial correlation between the CPR Availability per 1000 hh and the percentage of the sample women dependent on any CPR activity reveals a significant positive relation. It is observed that most of the regions with very high CPR availability have a higher percentage of women dependent on any CPR related activity. This is observed for Rajasthan, Gujarat and the hill states of Uttarakhand, Mizoram and Nagaland. However there are some regions where CPR dependence is high but CPR availability is low. These are vulnerable resource regions. The cases which are particularly significant in this regard are Assam (EHm), Meghalaya, Orissa and West Bengal. These states have been taken in relation to the availability of CPR and percentage of dependence. Jharkhand (EHg) and Maharashtra (EHg) though falling in medium category of CPR availability have seen a significant level of dependence on CPR. In the densely populated regions of West Bengal, Orissa and Assam where the level of overall development is low, dependence on agriculture is high and the average landholding size is very small, this matter is of particular significance. Lower CPR availability and a higher dependence on it creates conditions where resources would deplete at a rapid pace, higher competition for scarce resources would marginalise the poorest from access and depletion would have an impact on a large section of the population. West Bengal (EHm) has a high level of dependence on CPR but the availability is quite low (8.5%). This can be attributed to the high dependence on extraction from forests and grazing land and relatively low agricultural potential in hilly regions.

**Table 3.3.2: Correlation between CPR availability and CPR dependence**

<b>Variables</b>	<b>Availability of CPR/000 hh (Ha)</b>	<b>Any of the CPR Activity (%)</b>
<b>Availability of CPR/000 hh (Ha)</b>	1	.330*
<b>Any of the CPR Activity (%)</b>	.330*	1

\*. Correlation is significant at the 0.05 level (2-tailed).

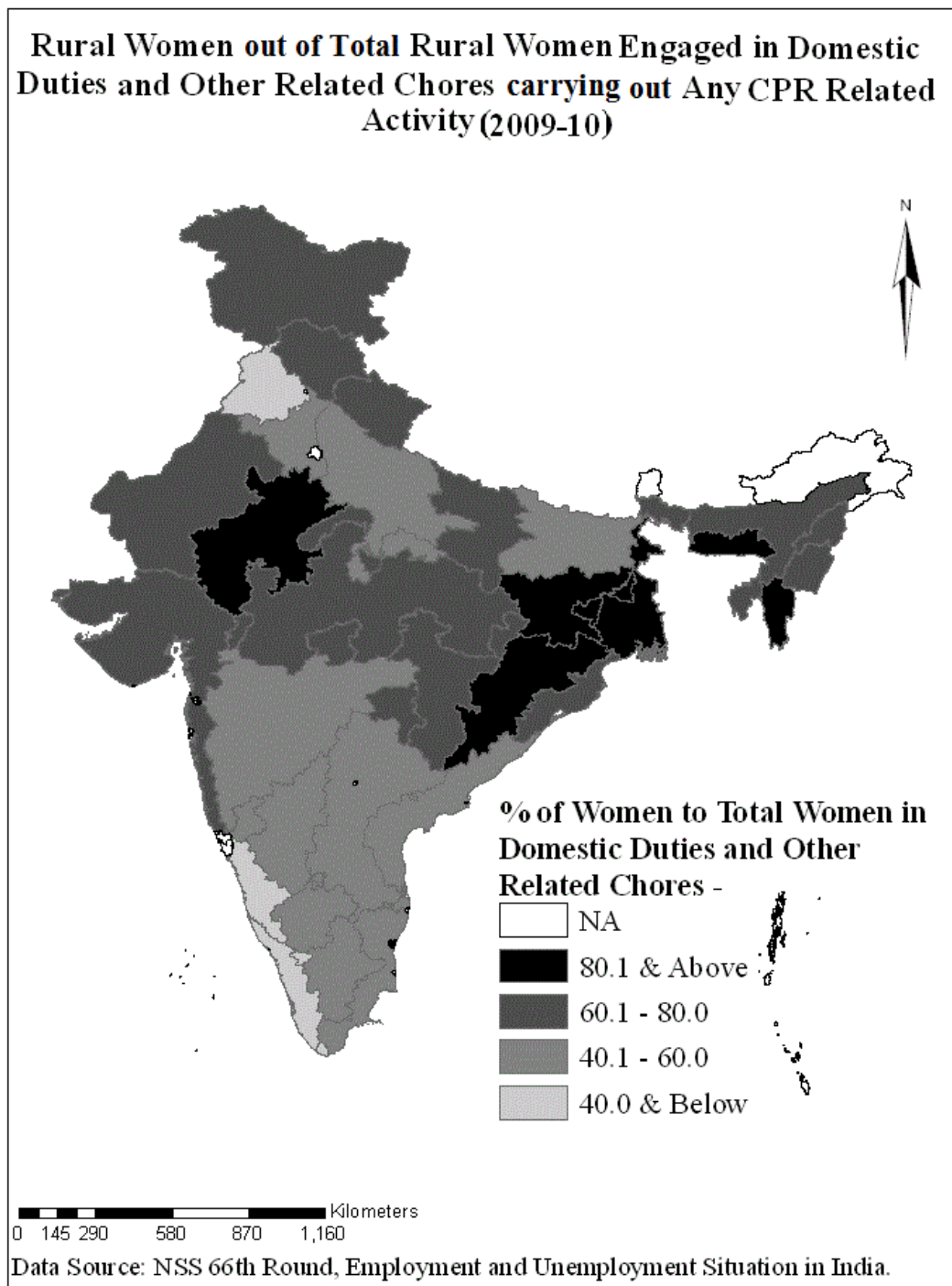
Participation of women in CRP activity indicates more towards the dependency at household level where, women does not have any other activity to engage and for the need of those households they are totally dependent on CPR. Collecting CPR products those households are meeting the minimum level of sustainable livelihood where women after doing the house work engaged at this activity to have better secure life. This engagement of women in CPR activity is largest in the states West Bengal, Meghalaya, Tripura, Orissa, Jharkhand and Rajasthan. Among these states some are having critical condition towards the underdevelopment, and dependence level highly rises because of the accessibility of common property resource. The share of women in collecting CPR is lowest in the states like Kerala, Punjab, where the condition of in Kerala is quite good with the better job and accessibility in other activity. Punjab is the state where the economy based on agriculture is highly profitable and restriction over the activities of women is very high with all the social norms that can leads to the lower share in participation of collecting CPR by women.

### **3.4 CPR availability and level of dependence on firewood, collection of fish, water**

In some CPR scarce region, there is a high dependence on the CPR based activities such as the collection of fuel; firewood is more in compared to the region such as Assam where there is low availability of CPR rather than the third type of CPR based activity. In the

MG region of Bihar, the collection of firewood is more observed, where the other activities such as collection of fish and water bringing activity are reported to be the lowest.

**Fig.3.4**



The WHm region of Uttaranchal, also reports the collection of firewood as it is a hilly region and livestock is also dependent on it and there is no other option left for the women there rather depending on the CPRs. Since the Meghalaya (EHm) region, collection of fuel wood is 2<sup>nd</sup> most dependent CPR activity followed by the collection of **water from outside the household** premises. In Orissa (EG), the availability of CPR is low, and due to less development in the region, it is observed that dependence on CPRs is very high and this is a cause of concern for this area. The region of West Bengal (EHm) has the lowest CPR availability (8.5%) among the other two regions which is **20.1% & 68.8%** respectively. This can be attributed to the fact that these are the most under- developed states and also basically these are the agriculture based regions and more women are dependent on the CPR based activity. So, again this is a problem region and if this dependence continues on the resources there it will affect the agricultural productivity, employment generated activities will also be badly affected if this dependence is going to continue in the long run.

There are also other regions where CPR availability is very low and also the dependence of CPR based activity is very low. These are the (UG) **regions of Punjab and Haryana, it can be because of the region that these two states are well developed agricultural region and also there are better employment opportunities.** The TD region of Rajasthan has reported very high CPR availability but the CPR dependence is low as compared to the other region of Rajasthan, (CHg), where CPR availability is very low, and the **% of** water collection from outside the household premises. This is a great concern for this region as it is semi-arid zone and farming is not very much developed and the inhabitants are mostly dependent on the CPRs. Here, CPR is mainly available in the form of wastelands, grazing lands, threshing lands, etc. The availability of CPR in the developed regions of Maharashtra, there is more dependence on the water collecting activity, highest in the EHg region and there is a low % of collection of fish, fruits, etc show that water availability is low in as these zones lie in the peninsular zone.

The hill states of J&K and H.P which lie in the WHm has the high collection of fuel wood as compared to the other two activities.



### 3.5 RELATING REDUCTION IN CPR AREA AND CHANGE IN CPR DEPENDENCE

Relating the change in CPR dependence with reduction in CPR area is significant for identifying regions which are highly vulnerable from the point of both resource and poverty. Regions where CPR reduction is high but at the same time dependence on CPR is increasing are where vulnerability is high because a reducing area of CPR will have to cater to an increasing population dependent on it thus increasing pressure on the common resources and marginalising the poor further in the competition to access the CPRs.

**Table 3.5 (i) Relating Reduction in CPR with change in CPR dependence**

State Agro- Climatic Region	Reduction as a % of Estimated Area	Change_Firew_CPR	Change_Fish_fruit_CPR	Change_Bringing_Water_CPR	Change_any CPR
Tripura (EHm)	0	-11.3	-10.9	21.2	23.5
Tamil Nadu (WC)	0	10.9	1.7	35.1	39.8
Kerala (WC)	0	5	0.8	16	15.2
Himachal Pradesh (WHm)	0	7.3	-7.6	23.4	14.0
Tamil Nadu (DP)	0.1	8.3	0.9	29.6	22.5
Gujarat (GC)	0.1	14.1	-6.1	21.3	18.9
Karnataka (WHg)	0.2	20.5	-2.9	39.4	34.7
Uttar Pradesh (WHm)	0.2	0	-42.2	24	0.1
Rajasthan (TD)	0.2	-11.6	-6.7	24.2	12.1
Madhya Pradesh (WHg)	0.3	-13.3	-4.7	14.9	12.6
Madhya Pradesh (EHg)	0.3	10.7	3.7	36.7	17.6
Tamil Nadu (EG)	0.4	16.8	-1.1	54	43.6
Manipur (EHm)	0.5	25.1	17.6	7.5	18.0
Madhya Pradesh (CHg)	0.7	8.6	6.5	15.9	14.6
Mizoram (EHm)	1.1	14.5	-12.9	0.1	-0.7
West Bengal (CHg)	1.2	0.8	-26.9	11.1	0.1
Rajasthan (EHg)	1.3	-1.1	0.9	6.2	5.3
Meghalaya (EHm)	1.5	-16.4	-6.6	2	-5.0
Jammu & Kashmir	1.6	1.9	-6.9	28.4	21.2

(WHm)					
Maharashtra (WHg)	1.7	15.7	-0.7	49.9	39.0
Andhra Pradesh (EG)	1.8	-1.7	-2.4	37.5	30.3
Haryana (UG)	1.9	-1.9	10.2	38.8	22.4
Total (all)	2	3	-1.4	21	15.2
West Bengal (LG)	2.6	-2.6	0.9	3.1	2.3
Nagaland (EHm)	2.8	6.4	12.9	40.2	14.6
Bihar (MG)	3	10.5	2.8	33.3	21.9
Bihar (CHg)	3.6	-15.7	-21.6	13.2	-5.4
Assam (EHm)	4	-21.9	-13.6	19.3	-5.2
Orissa (EG)	4	-0.7	-8.6	26.1	20.0
Punjab (UG)	4.5	16.2	4.6	4	18.7
Karnataka (DP)	5.3	16.9	6.6	43.4	40.9
Andhra Pradesh (DP)	6	16.3	-1.2	43	42.4
Uttar Pradesh (TG)	7.6	-5	-4.2	15.8	8.6
<b>Maharashtra (EHg)</b>	8.9	53.9	13.8	18.8	18.5
<b>Uttar Pradesh (MG)</b>	10.3	3.4	5.6	10.2	10.6
Orissa (CHg)	16.2	3	4.1	6.9	1.5
<b>Uttar Pradesh (CHg)</b>	31.1	-1.7	-47.8	12.7	9.6
West Bengal (EHm)	61.2	-8.2	-8.3	-13.5	-3.3
Karnataka (WC)	-	18.5	20	71.4	55.5
Maharashtra (WC)	-	11.2	15.9	27.1	21.6

Source: Computed from NSS 55<sup>th</sup> (1999-2000) & 66<sup>th</sup> (2009-2010) Rounds.

See Appendix –Table 3.5 (ii).

### 3.6 Reduction in CPR with change in Pattern

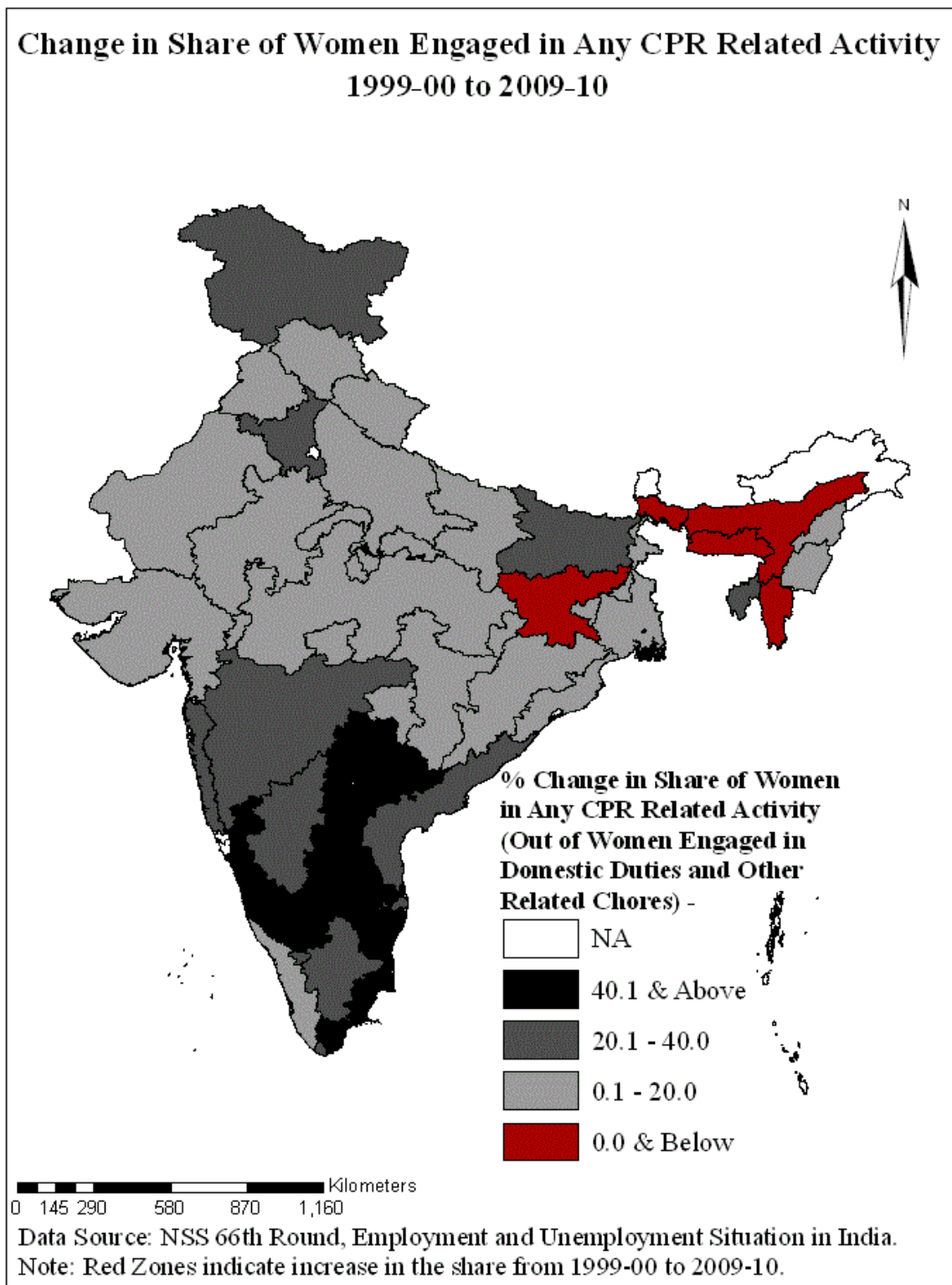
The table reveals that the regions where CPR reduction is high are mainly located in the eastern part of the country in Uttar Pradesh (EHg) and (MG), Orissa (CHg) and West Bengal (EHm). The regions with very low reduction are Tamil Nadu, Karnataka (WHg), Rajasthan (TD), Uttar Pradesh (WHm), Madhya Pradesh (EHg), Madhya Pradesh (WHg), Kerala and hill states of Himachal, Tripura, Manipur and Mizoram.

Regions which have seen an increase in the overall dependence on CPR are the southern states of Karnataka, Andhra and Tamil Nadu. While the regions which have seen a reduction or at least a sustained level CPR dependence are the northern and eastern regions of Uttar Pradesh, West Bengal, Assam, Orissa and Bihar.

West Bengal (EHm) has seen the highest reduction in CPR area which can be attributed to a reduction in fish and fruits collection, firewood collection and a very low level change in overall CPR related activities.

Share of women participating in any of the CPR activity is highest in the southern states, where most of the northern states are having lower participation of women in collecting any of the CPR activity (Except Haryana, Bihar where it is high because of the condition of women there. To have a job for the needy family women are forced to engage in any of the CPR activity. Parts of Andhra and Tamil Nadu where forest resources are easily available women can engage in that activity signifies the highest availability and dependence level very high. In the Northern States especially Jharkhand and North eastern states the percentage share of women engaged in any CPR activity is very less. It can be of two kinds where the accessibility of these resources matter in Jharkhand and in North Eastern States women have the better prospect and social status with a good economic level not have dependence on the basic CPRs.

Figure 3.6



### 3.7 Implications

Overall in the country one finds a negative relation between reduction in CPR area and change in dependence on CPR related activities. This has favourable implications for the regions. The regions where CPR dependence has increased over time are also seen to be regions where reduction in CPR area is low implying that the resource availability of the region is able to sustain the increased level of dependence on it. Similarly, it is observed that regions of West Bengal (EHm), Orissa (CHg) and Uttar Pradesh (CHg) where CPR area reduction is high also show a reduction in CPR dependence.

**Table 3.5** Correlation

Variables	Reduction as a % of Estimated Area	Change_anyCPR	Change_Firew_CPR	Change_Fish_fruit_CPR	Change_Bringing_Water_CPR
Reduction as a % of Estimated Area	1				
Change_anyCPR	-0.278	1			
Change_Firew_CPR	-0.126	.538**	1		
Change_Fish_fruit_CPR	-0.213	.458**	.473**	1	
Change_Bringing_Water_CPR	-.435**	.845**	.331*	0.297	1
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Source: NSS 55<sup>th</sup> & 66<sup>th</sup> Rounds.

Three Agro-Climatic Regions show a reasonable reduction in CPR area while dependence on CPRs has substantially increased. These are the regions which are highly vulnerable in terms of both resource condition and poverty implications since the increased dependence is now catered to by a reduced CPR area thus increasing the pressure on increasingly scarce resources pushing the poor and marginalised population to the brink of sustenance. These regions are Uttar Pradesh (CHg and Mg) and Maharashtra (EHg). It is important to note that these are underdeveloped regions where an increased dependence on reducing CPRs can have negative implications for the conditions of the already marginalised population.

Dependence on fire wood increased in the states like Karnataka, Tamil Nadu, Maharashtra, Andhra Pradesh and Mizoram. These are mostly dominated with the forest resource region, but all the forested region are not showing the same result, the significance lies here with the decreasing level of economic development in the surrounding region over a particular time period that can leads to the increasing level of dependency, where the thrust is on the poor. It is decreasing in the states like Rajasthan, Bihar, Meghalaya and Assam where the shift can be taken place towards the other activity. In case of Madhya Pradesh it is also decreasing though the dominant forested track is available there.

Karnataka, Maharashtra, Haryana, Manipur and Nagaland are showing the increasing dependency on fishing and fruits. In North Eastern States fruits are important CPR, the accessibility and dependence varies with the condition grows there. In overall condition dependency on fruits and fishing has decreased in most of the states. It is very high in the states like Uttar Pradesh, West Bengal, Bihar and Assam. The reason of decreasing fishing activity may of the conversion of the fishing areas to agricultural land.

The dependency in bringing water is increased in all over India, all the states are having more dependence in this common property resource showing the scarcity condition prevailing and increasing over time. Except West Bengal where the dependency is decreased from earlier in context of bringing water. The states like Karnataka, Madhya Pradesh, Andhra Pradesh, Maharashtra and Haryana are showing largest increase in the dependency level to bring water. Most of the states of South India are experiencing more dependence on common property resources rather than private showing the equal access of those resources and the dependency increase increases their vulnerability also.

### **3.8 LINKAGE BETWEEN LEVELS OF CPR AND REDUCTION IN CPR**

In West Bengal (EHm ) the reduction has been the maximum and the current level of CPR is the lowest for the region which is not a favourable scenario for the resources since a region with already a low resource base if sees a higher reduction will become vulnerable to

resource scarcity. Some regions like Uttar Pradesh (CHg) and Uttar Pradesh (MG) which also fall in the category of the regions with high reduction have medium level of CPR availability.

Regions like Gujarat (GC ), Meghalaya (EHm ), Madhya Pradesh (CHg ), Nagaland (EHm), Mizoram (EHm ), Rajasthan (TD ) have a high level of CPR but have seen an overall a lower level of reduction in CPR presenting a sustainable and favourable condition in this region.

Thus one can infer that the regions with low to medium level of CPR have seen the highest level of reduction in CPR presenting an unsustainable situation in the region.

**Table 3.8 (i) Comparing current CPR status and reduction.**

<b>State Agro- Climatic Region</b>	<b>Reduction as a % of Estimated Area</b>	<b>CPR Per 000 Households (in Hac)</b>
<b>Tripura (EHm )</b>	0	13.7
<b>Tamil Nadu (WC )</b>	0	30.6
<b>Kerala (WC )</b>	0	118.7
<b>Himachal Pradesh (WHm</b>	0	332.9
<b>Tamil Nadu (DP )</b>	0.1	120.1
<b>Gujarat (GC )</b>	0.1	719.0
<b>Karnataka (WHg )</b>	0.2	281.8
<b>Uttar Pradesh (WHm )</b>	0.2	707.3
<b>Rajasthan (TD )</b>	0.2	4768.6
<b>Madhya Pradesh (WHg )</b>	0.3	421.7
<b>Madhya Pradesh (EHg )</b>	0.3	691.7
<b>Tamil Nadu (EG )</b>	0.4	197.8
<b>Manipur (EHm )</b>	0.5	171.7
<b>Madhya Pradesh (CHg )</b>	0.7	974.1
<b>Mizoram (EHm )</b>	1.1	4369.1
<b>West Bengal (CHg )</b>	1.2	68.8

<b>Rajasthan (EHg )</b>	1.3	717.1
<b>Meghalaya (EHm )</b>	1.5	719.4
<b>Jammu &amp; Kashmir (WHm )</b>	1.6	143.3
<b>Maharashtra (WHg )</b>	1.7	295.3
<b>Andhra Pradesh (EG )</b>	1.8	142.9
<b>Haryana (UG )</b>	1.9	48.1
<b>Total (all )</b>	2	311.6
<b>West Bengal (LG )</b>	2.6	20.1
<b>Nagaland (EHm )</b>	2.8	1493.7
<b>Bihar (MG )</b>	3	42.3
<b>Bihar (CHg )</b>	3.6	237.4
<b>Assam (EHm )</b>	4	45.9
<b>Orissa (EG )</b>	4	89.2
<b>Punjab (UG )</b>	4.5	17.5
<b>Karnataka (DP )</b>	5.3	233.1
<b>Andhra Pradesh (DP )</b>	6	198.4
<b>Uttar Pradesh (TG )</b>	7.6	66.4
<b>Maharashtra (EHg )</b>	8.9	309.1
<b>Uttar Pradesh (MG )</b>	10.3	101.5
<b>Orissa (CHg )</b>	16.2	409.7
<b>Uttar Pradesh (CHg )</b>	31.1	206.2
<b>West Bengal (EHm )</b>	61.2	8.5
<b>Karnataka (WC )</b>	-	218.2
<b>Maharashtra (WC )</b>	-	309.0

Source: NSS Report No. 452, Common Property Resources in India( 1998).



### 3.9 CONCLUSION

It is observed that most of the regions with very high CPR availability have a higher percentage of women dependent on any CPR related activity. This is observed for Rajasthan, Gujarat and the hill states of Uttarakhand, Mizoram and Nagaland. However there are some regions where CPR dependence is high but CPR availability is low. These are vulnerable resource regions. The cases which are particularly significant in this regard are Assam (EHm), Meghalaya, Orissa and West Bengal.

Lower CPR availability and a higher dependence on it creates conditions where resources would deplete at a rapid pace, higher competition for scarce resources would marginalise the poorest from access and depletion would have an impact on a large section of the population. West Bengal (EHm) has a high level of dependence on CPR but the availability is quite low (8.5%).

The regions where CPR reduction is high are mainly located in the eastern part of the country in Uttar Pradesh (EHg) and (MG), Orissa (CHg) and West Bengal (EHm). The regions with very low reduction are Tamil Nadu, Karnataka (WHg), Rajasthan (TD), Uttar Pradesh (WHm), Madhya Pradesh (EHg), Madhya Pradesh (WHg), Kerala and hill states of Himachal, Tripura, Manipur and Mizoram. West Bengal (EHm) has seen the highest reduction in CPR area which can be attributed to a reduction in fish and fruits collection, firewood collection and a very low level change in overall CPR related activities.

From the given analysis it can be inferred that the regions with low to medium level of CPR have seen the highest level of reduction in CPR presenting an unsustainable situation in the region.

# CHAPTER-4

## CPR- DEPENDENT WORK OF WOMEN BY SOCIO-ECONOMIC PARAMETERS

**4.1** This chapter deals with the CPR Dependent work done by women which are defined by different socio-economic parameters such as **Education, Social Group, Monthly Per Capita Expenditure and Operational Class Holdings**. Already in the previous chapters we have discussed about the dependence of Rural Women on CPRs , availability, reduction of CPRs and the different CPR –Activities performed by the Rural Women and also the changes in their work pattern was dealt with and the factors and the also the problem regions have also been discussed. Though, we have discussed a lot about the women’s dependence on CPRs but still it is not clear which group among the rural women are the most vulnerable one. So, here is an attempt to study that on what Socio-Economic Parameters, these women able to carry their CPR-dependent work.

### **4.2 CPRs and the Rural Poor relationship: A View from the literature**

This section tries to link between the Common Property Resources with the rural poor. A lot of case studies have been done to study the relationship between the CPRs and the poor. Poverty and gender are linked with each other and the rural poor are directly related to these poor people. People are directly related to the CPRs as they do not have the other options and they are heavily dependent on these resources for their survival. They are the most marginalised section of the society. According to the World Bank, “poverty is multi-dimensional extending from low levels of health and lack of education, to other ‘non-material’ dimensions of well-being, including gender gaps, insecurity, powerlessness and social exclusions (**A Report on Poverty-Environment-Gender-Linkages**). This report has also highlighted that resource degradation is very acute in the rural areas. Rural poor families mainly rely on many resources of income.

Even the households who own land, farming alone cannot provide sufficient means of survival, where it is noted that population leads to reduced farm size. Poor rural families generally rely on a wide variety of on & off-farm activities and income sources. They include

activities such as gathering of firewood, preparing charcoal, fishing, hunting, handicrafts & gathering of non-timber forest products such as medicinal plants, fruits, rubber, and etc. Many landless poor also work as farm labourers. Common Property Resources (CPRs) contribute to approx. US \$ billion a year to the incomes of the poor rural households in India, or about 12% to households to rural income of poor rural households. CPRs access to the poor and use can be considered as an indigenous system which works through unequal power structures to provide significant benefits to the poor (*Beck & Nesmith, 2001*). Beck has referred Forsyth et.al (1998) challenge the dominant view which sees environmental degradation & poor linked in a downward spiral: poor people are forced to over-exploit their environments, which became increasingly degraded. CPRs also provide substantial benefits to the poor in the lean season. Evidence from India shows that gathering and use of CPRs is largely women's and children's work (*see Ghosh, 1998; Agarwal, 1995; Nesmith, 1991, Pasha, 1992; Chen, 1991*).

A case study on the CPRs of the Rural Poor in Karnataka have been conducted which determine to conduct the study of Common Property Resources of the rural poor of the four villages of the Dharwad District. The study conducted on these regions highlight that there are lot of degradation of the CPRs due to the over-exploitation of the CPRs (**N. Gowda & Savadatti, 2004**). One of the objectives of this study, it is to analyse the gender factor in CPR product collection. It is of the general view, researchers that CPR produce collection was mostly done by women and children (**Beck and Ghosh, 2000**). **There is** the findings done by the study of the Karnataka region, a substantial proportion of the total geographical area of the resource category. Also, there was a marginal decline in area of the CPR between 1978-79 to 1998-99. Forests area accounted for more than 95% of the total CPR area. More than 2/3rds of energy requirements are met by the CPRs collected from the fuel wood. Due to the exploitation of the CPR (forest) the situation is moving towards the problems of the '**Tragedy of Commons**'.

Common Property Resources play a very important role in income and employment generation among the poor. This literature has dealt with the Case study of The Rope making industry, which has dealt with the industry of rope making of the Saharanpur district of the U.P State. The traditional Indian cots which are woven of rope on wooden frame have one of the important part of the rural destitute or the rural households (**Johri & Krishnakumar,**

1991). It is emphasised on the fact that this part of the U.P is based on the rope making industry, how it has helped the margined groups of the poor in providing them employment, who are engaged in collecting of particular type of grass from which these ropes are made. So, from the above literature, it can be implied that poor are more dependent on the poor.

**4.3 Literature from above case studies, that marginalised appears to be more dependent on CPRs, we hypothesize that our current analysis of States and India level that the marginalised groups (backward social groups, the landless, illiterate and the poor) constitute the sections that are more highly independent on CPRs.**

Table 4.3.1 India Level % of Any CPR Activity

Any CPR Activity	LAND CULTIVATED CLASSES				
	Landless	Marginal	Small	Semi Large	Large
No CPR Activity	99.64	0.18	0.12	0.06	0.00
With any CPR activity	<b>99.80</b>	0.13	0.06	0.01	0.00
Total	99.73	0.15	0.09	0.03	0.00

**Source:** Computed from 66th Round of NSSO.

See Appendix for other CPR activity.

The above table shows that among the land cultivated classes across the All India Level, Landless women has the highest dependence ratio among the on any type of CPR activity performed by them as they do not possess land on their own and do not have any other source of income. The marginal are also more or less the same as that of the landless rural women own. It is clearly evident that the small and large farmers' dependency on the Common Property Resources are very less.

Table 4.3 .2 India Level % of Any CPR Activity

<b>SOCIAL GROUPS</b>				
<b>Any CPR Activity</b>	<b>STs</b>	<b>SCs</b>	<b>OBCs</b>	<b>Others</b>
No CPR Activity	3.84	17.72	45.63	32.80
With any CPR activity	11.58	<b>24.35</b>	<b>38.09</b>	25.98
Total	8.32	21.56	41.26	28.85

Source: 66th Round of NSSO.

See Appendix for other CPR activity

Among the various social groups (SCs, STs, OBCs and other groups), the % taken together of the three groups, i.e STs+SCs+OBCs = 64.02 % which is more than the others. In doing any type of CPR based activity. If SCs, SCs and OBCs group taken separately, then we can observe **that OBCs are the most marginalised ones** followed by the **SCs**. It means that they are the most vulnerable social groups at the all India level in carrying out any type of CPR Activity.

**Table 4.3.3** India Level % of Any CPR Activity

	<b>Illiterate</b>	<b>Primary</b>	<b>Middle</b>	<b>Secondary</b>	<b>Higher Secondary &amp; Above</b>
No CPR Activity	42.94	22.96	14.83	10.69	8.58
With any CPR activity	<b>55.08</b>	<b>24.59</b>	12.41	5.07	2.85
Total	49.97	23.91	13.43	7.44	5.26

Source: 66th Round of NSSO.

See Appendix for other CPR activity

Level of General Education are categorised mainly into five types:

- Illiterate
- Primary Education
- Middle Education
- Secondary Education
- Above Higher Secondary

From the above table, it is clear that literacy has a direct relationship with performing any type of CPR activity. Literacy level decreases the dependence on CPRs as people being educated get involved into other activities or ‘skilled labour’ rather than depending on CPRs. Thus, we can see that illiterate rural women have the highest % of dependence on any type of CPR based activity. As, it is clearly evident that level of education when goes on increasing then rural women do not much depend on the Common Property Resources for their dependence.

**Table4.3.4** India Level % of Any CPR Activity

	<b>MPCE: Rs. 450 and Below</b>	<b>MPCE: Rs. 450 - 900</b>	<b>MPCE: Rs. 900- 5000</b>	<b>MPCE: Rs. 5000- 10000</b>	<b>MPCE: Rs. 10000 and Above</b>
No CPR Activity	5.64	45.15	48.78	0.38	0.05
Within Any CPR Activity	<b>10.11</b>	<b>59.25</b>	30.58	0.04	0.01
Total	8.23	53.32	38.23	0.19	0.03

**Source:** 66th Round of NSSO

See Appendix for other CPR activity

From the above table, it is clear that rural women belonging to the lowest group of MPCE are dependent more on the CPR based activity. About 10.11% of women lies below Rs 450 MPCE group which shows that women belonging to the most vulnerable group depend on any type of CPR based activity. The % of women in the 2<sup>nd</sup> category of MPCE is the highest one and in the above study it is clear that they are the largest % of vulnerable group of rural women.

The same analysis is also done for the other three CPR based activities which are as follows: Fuel wood collection, collection of fruits, fish, etc and also bringing water from outside the outside household premises.

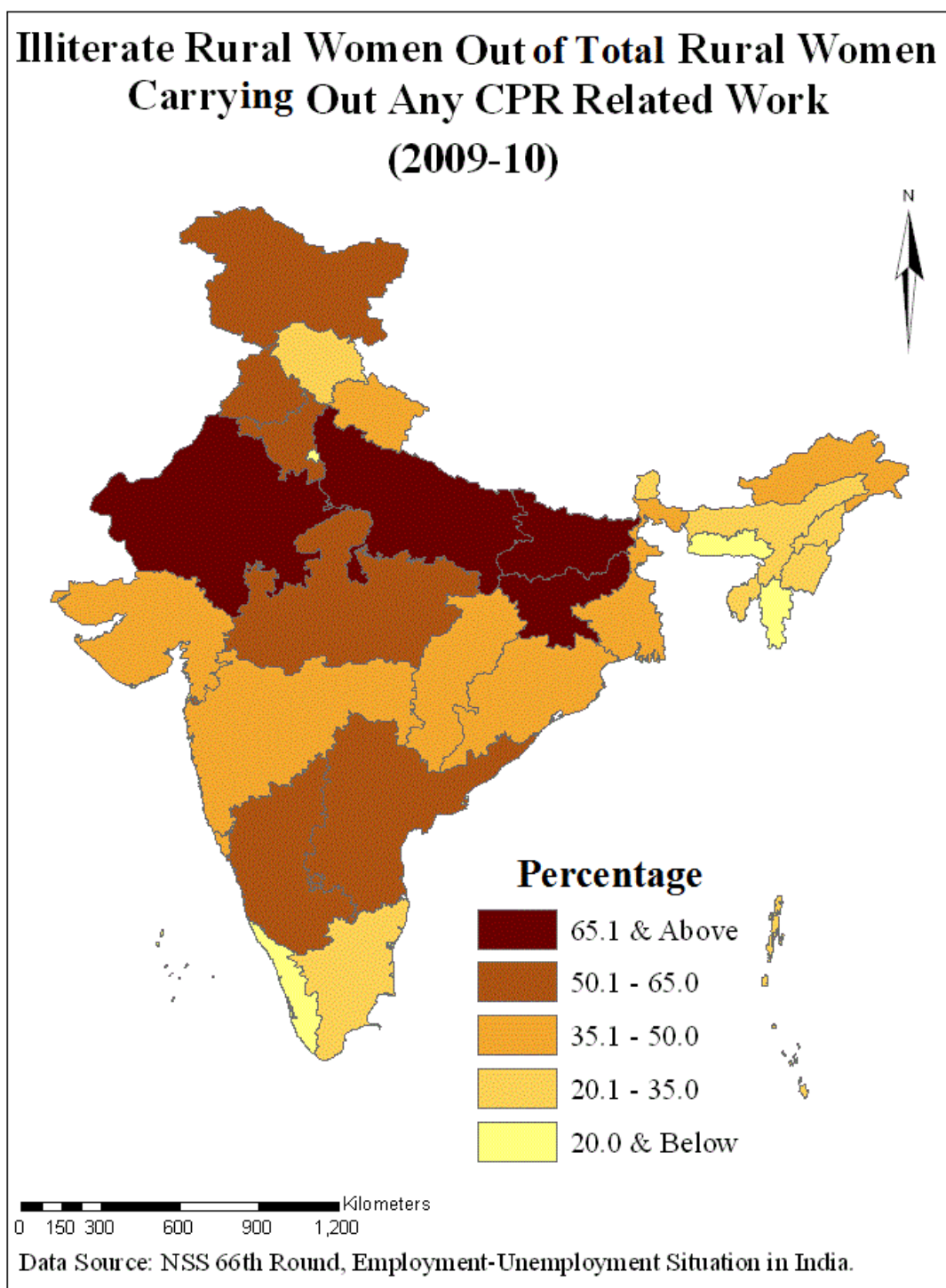
Among the landless classes, landless are the most marginalised one and they form the highest % of rural women engaged in collection of fuel wood. Landless rural women bear the brunt of depletion of CPRs as they do not have their own land and they have to spend extra time on carrying the above type of activity. They form 99.82 % of the most marginalised group. Among the social groups, **OBCs** are the most vulnerable groups than all the three groups and forms 37.17 % followed by the SCs who carry out the collection of fuel wood. Illiterates have the highest % of rural women who carry out the collection of fuel wood for the household consumption, ie 59.26%. This shows a direct relationship of CPR activity with that of literacy level. Women belonging to the 2<sup>nd</sup> lowest MPCE group i.e between Rs 450 and 900 the % of rural women is the highest one. This means that capital plays a very important role in deciding the status of the rural women. So, women of this 2<sup>nd</sup> group carry out the collection of fuel wood for their household consumption.

All the results are the same for the other two CPR activities, i.e collection of fruits and bringing water from outside the household premises. And the most vulnerable among them are the same to that of the first two activities, ie any CPR based activity and collection of fuel wood.<sup>4</sup>

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<sup>4</sup>For further clarifications, please see the Appendix table.

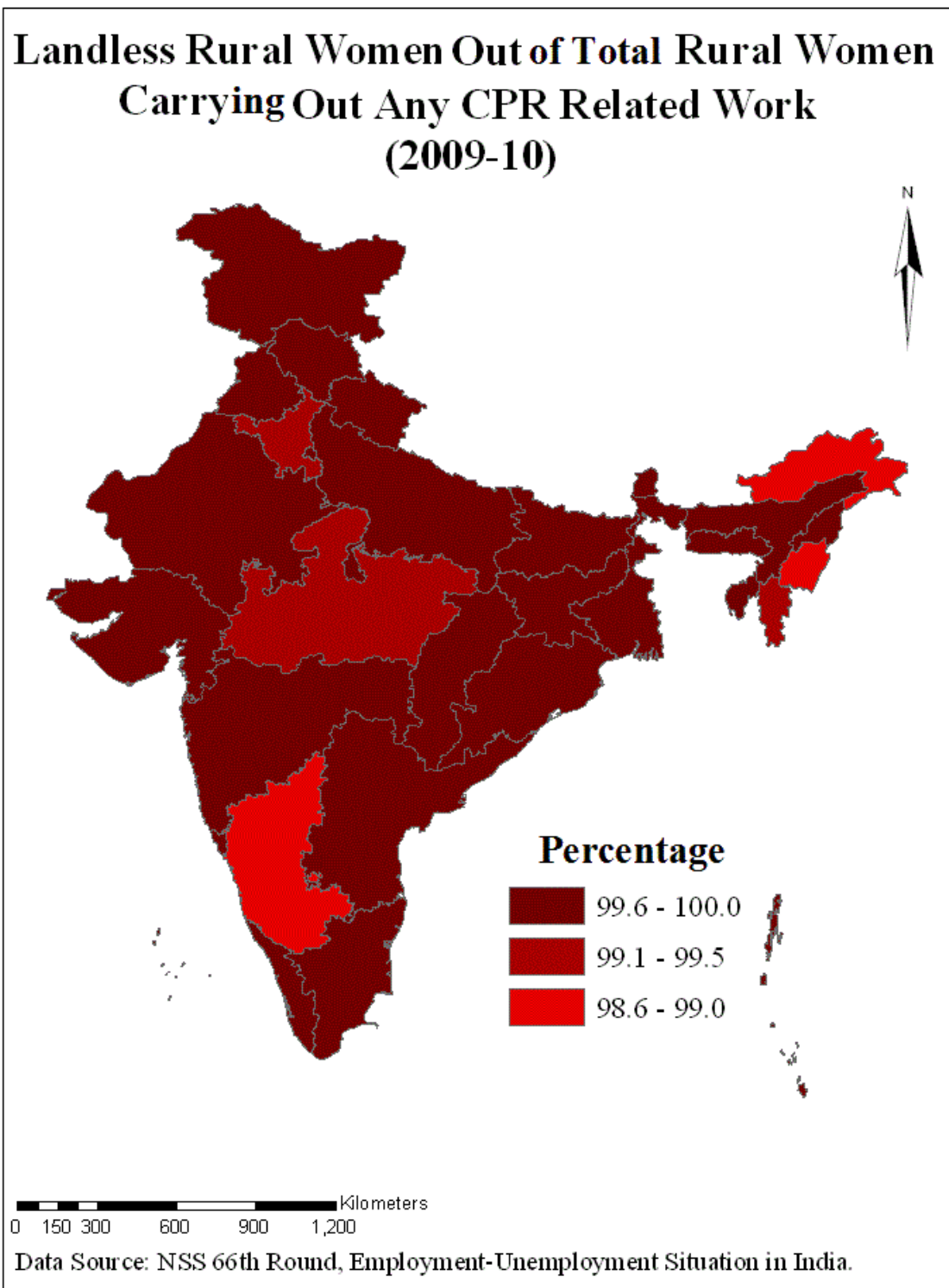
Fig. 4.3 (a)





In the above map, it is clearly evident that the distribution of percentage of Illiterate Rural Women who carry out any CPR-Related work is divided into five categories across the different States. **The States of Rajasthan, Uttar Pradesh, Bihar and Jharkhand comes under the highest category where the % of Illiterate Women** who carry out any of the CPR- Related activity is the highest one. We can see that the illiteracy level is also one of the major factors that forces the women to carry out the non-skilled work and are defined by NSS as ‘non-worker’. **Education has** the direct relationship with the women’s work. On the contrary, the States where literacy level is very high like **Kerala, North Eastern States of Meghalaya, Mizoram and the National Capital Territory of Delhi has the highest level of literacy** and their rural women are the least engaged in carrying out any one of the CPR activity. The States like **Jammu & Kashmir, Punjab, Haryana, Madhya Pradesh, and Karnataka & Andhra Pradesh** comes under **the 2<sup>nd</sup> highest category** under Illiteracy where the % of rural women engaged in carrying out any of the CPR related activity is 2<sup>nd</sup> highest category. The developed States like Maharashtra, Gujarat, Chhattisgarh, Orissa, Uttaranchal (former Uttar Pradesh), Sikkim, Arunachal Pradesh & West Bengal comes respectively comes under the medium category of Illiteracy Level, **i.e 35.1 to 50.0%**. The hill States of Himachal Pradesh & other North Eastern States like Sikkim, Assam, Manipur, and Nagaland & Tripura has the 2<sup>nd</sup> highest level of literacy and the women in these States are reported under **non-workers (defined by NSS)** are related with the 2<sup>nd</sup> least % of rural women carrying any one of the CPR activity. Thus, there a direct relationship of literacy and women’s work related to CPRs.

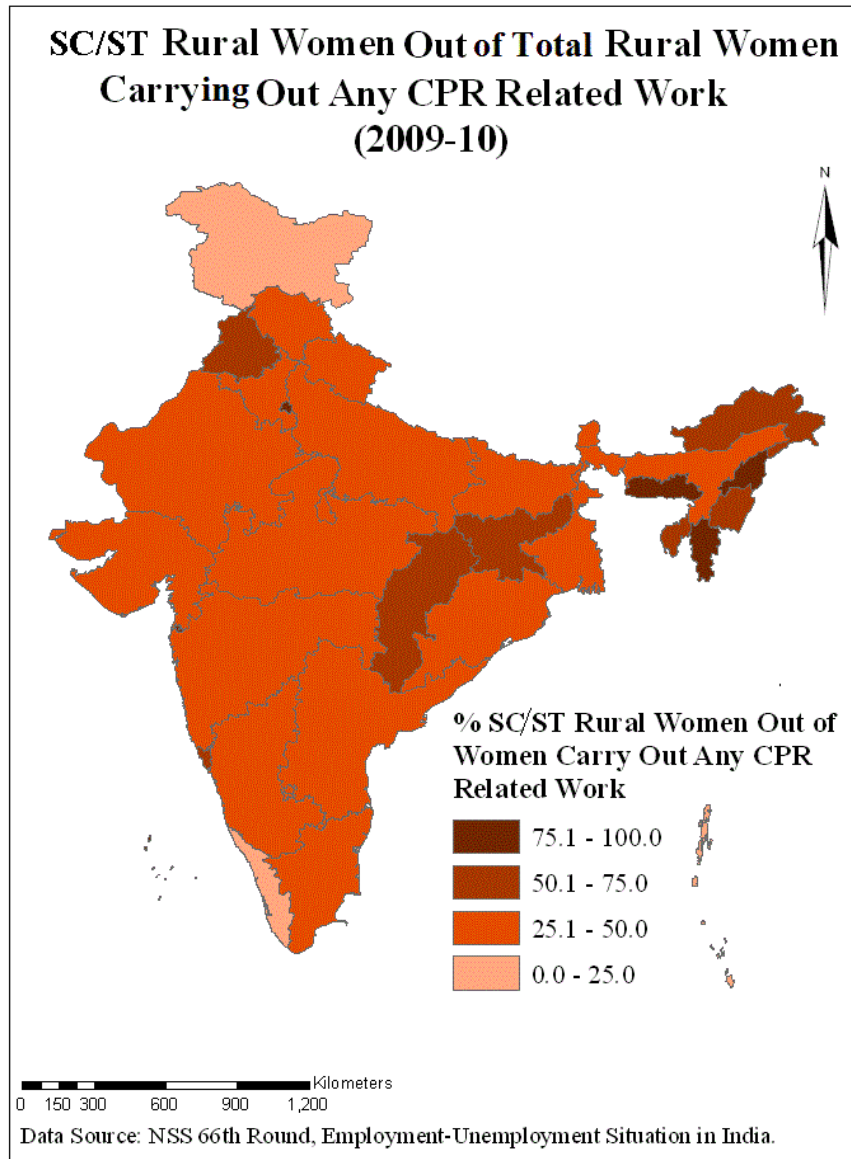
Fig 4.3 (b)



In the figure 4.2, there is a distribution of % landless rural women who carry any out of the CPR related work. The whole country is divided into three categories: a) States having the highest % of landless rural women engaged in carrying any one type of CPR-related activity and c) comes under the 3<sup>rd</sup> category which has the least % of women engaged in any one of the CPR related activity.

The States like Karnataka, Arunachal Pradesh and Andhra Pradesh comes under the category of least % of rural landless women carrying any type of CPR activity while the States like Haryana, M.P and Mizoram comes under the medium category of % of landless women carrying any CPR related activity. The remaining States have the highest % of landless rural women engaged in carrying any of the CPR activity. In this category, the majority States' women are landless and this is mostly due to the Patriarchal nature of the society (**Shiva, Bina Agarwal etc**). In this type of society, the land is inherited from father to son and so on.

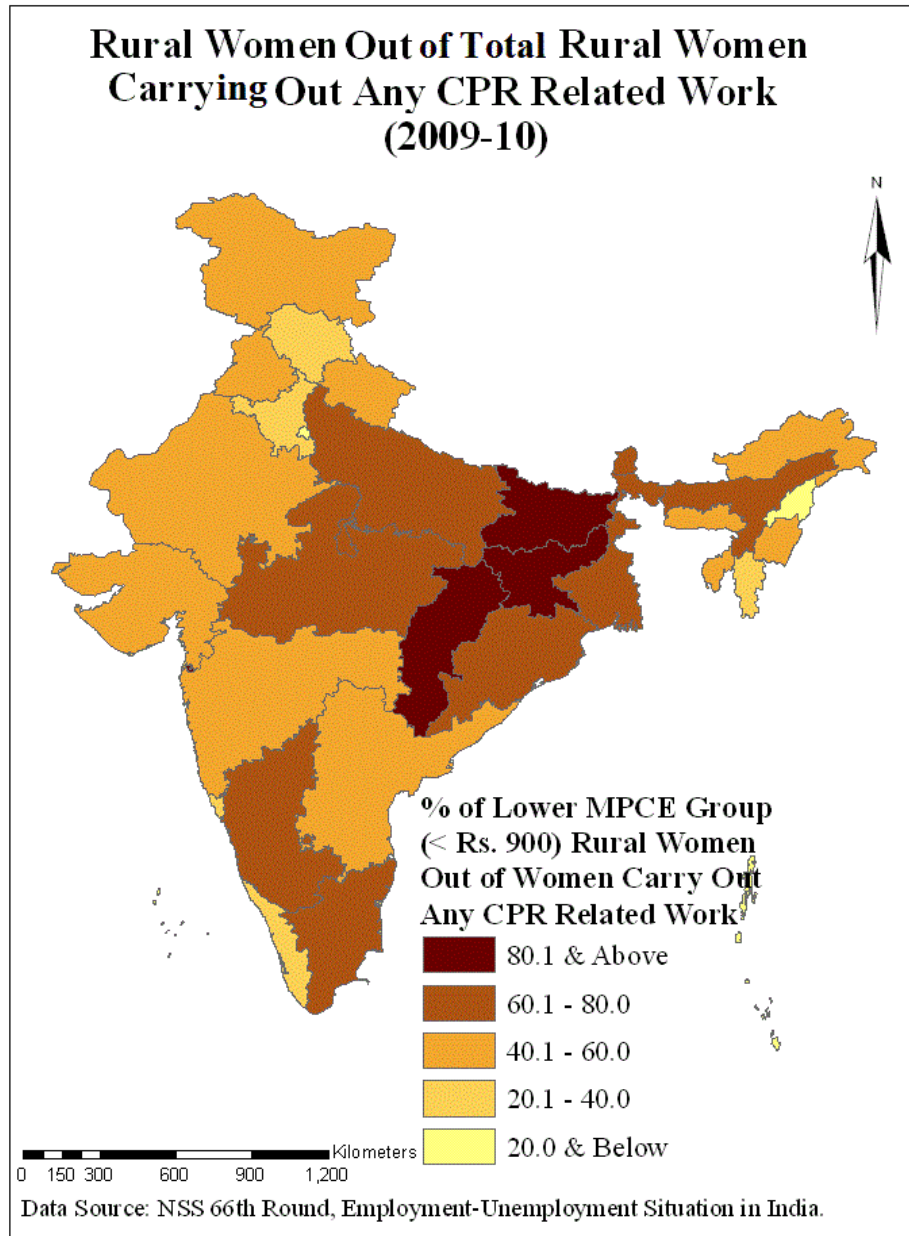
Fig.4.3 (c)



Meghalaya, Nagaland & Mizoram comes the highest % of SC/ST Rural Women out of Any CPR Related work, ie 75.1 % to 100.0 %. States like Jammu & Kashmir and Kerala has the least SC/ST % of Rural Women who carry out any CPR related work whose % range from 0.0% to 25.0%. States like Punjab, Chhattisgarh, Jharkhand, Arunachal Pradesh, Manipur and Tripura respectively has the 2<sup>nd</sup> highest % of SC/ST rural women engaged in any one type of CPR related Activity ranges from 50.1 % to 75.0% while the remaining states covers a very large area under the % of SC/ST rural women under the 2<sup>nd</sup> lowest category who carry out

any type of CPR Activity. These groups are assumed to be the most marginalised among the other groups such as OBCs and others.

Figure 4.3 (d)



The socio-economically backward States like Bihar, Jharkhand (former Bihar) & Chhattisgarh have the highest % Illiterate Rural Women who comes under the lowest category of MPCE group are engaged in carrying out any type of CPR related activities. The State of

Nagaland comes under the least % of women involved into involved in carrying out any type of CPR related activities comes under the lowest category of the least % of women engaged in carrying out any type of CPR related work. Jammu & Kashmir, Punjab, Uttaranchal, Rajasthan, Gujarat, Manipur, & Tripura respectively comes under the medium category of lower % MPCE group of Rural Women carrying out any of the CPR engaged in any type of activities . While the other two categories come under the 2<sup>nd</sup> least% and 2<sup>nd</sup> highest % of women belonging to the MPCE group who belong to less than Rs 900.

#### **4.4 CONCLUSION**

Thus, it is clear that the most marginalised groups, ie Illiterates, Landless, social groups (OBCs and SCs and STs) and rural women belonging to the lowest and the 2<sup>nd</sup> lowest MPCE groups are more dependent on the CPRs activity which was proved at the India level for all the activities and it was shown spatially across different States. Thus, our hypothesis is proved.

## CHAPTER-5

### CONCLUSION

The present study is based on the availability of CPRs across different Agro-Climatic Zones in India. The availability of the CPRs was found the highest across the regions such as the CHg regions of Rajasthan, Madhya Pradesh (all the regions of Madhya Pradesh). This data of CPR was available for only one period of time only for the Year 1998 and it. Lot of variations in the availability of the data was observed.

The CPR is reducing in the areas such as West Bengal (EHm), Uttar Pradesh (CHg) zone, Orissa (EHg), Uttar Pradesh (MG), Maharashtra (EHg). This can be due to the reason that these regions are rapidly converting forests land into agricultural lands for the increasing demands of these lands as these areas are one of the most densely populated regions of the world. West Bengal (WHm) has a very low endowment area. The low to medium endowed area are the DP region of Andhra Pradesh, WHg region of Karnataka, EHg region of Maharashtra and the TG region of Uttar Pradesh. The regions with medium to high level of CPR endowment have seen very low level of reduction in CPRs are Tamil Nadu (DP), Gujarat (GC), Karnataka (WHg), Uttar Pradesh (WHm), and Rajasthan (TD). Among these Rajasthan (TD), have very level of CPR availability.

Level of CPR dependence is high in the regions of Orissa (CHg), West Bengal (CHg), Meghalaya, Mizoram. It can be attributed to the reason that these regions are under-developed and population density is very high, so their dependence on the CPRs is also very high- negatively associated with the CPR dependence. Eg. Low CPR dependence is in highly developed regions, e.g. Punjab, Karnataka, Kerala, Tamil Nadu and Andhra Pradesh.

There is high increase in the CPR dependence in the Southern regions of Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and Maharashtra. These are highly developed regions. Whereas a decrease / sustained level of CPR dependence is in the low regions of Assam(EHm), Bihar (CHg), Meghalaya (EHm), West Bengal (EHm) & Mizoram respectively. These are also the regions where there is high incidence of Poverty. This is so because most of these regions are poor regions and people, need the bare minimum requirements to sustain their livelihood. This is because of the reason that they can't think more of development because, they are themselves the poverty stricken people who need minimum requirements to sustain their livelihoods.

CPR dependence has shown increase in regions where CPR endowment is moderate . High and CPR reduction is low. This is highly favourable as the resource base is able to sustain the population dependent on it. Development has not led to a reduction in the CPR dependence. Hence, it is observed that CPR endowments have led to CPR dependence.

CPR reduction is highest in the under-development regions where incidence of poverty is high. This is due to the fact that they do not have other options rather than to collect fuel wood, fodder, collection of fish, fruits, etc., collection of water from outside the household premises. As they are poor, so the literacy rate is also very low in this region and people are only engaged in non-skilled work, semi-skilled work to sustain their livelihoods. So, only these CPR resources are great assets to this poor people and if their depletion rate is increased then it will be a great problem to the people of these regions as they do not have other source of livelihood. These are the regions of West Bengal, Uttar Pradesh, Orissa, Maharashtra (EHg). These regions are basically the tribal regions where most of the population form this group and they are heavily depended on CPRs. Since, the marginalised are the most affected as they are most dependent on these resources as there is depletion of CPRs. The marginalised people come from different sections of the society such as landless, marginal farmers, small farmers, who are illiterate people, or education up to the primary level, marginalised sections of the society such as SCs, STs, OBCs and others. People belonging to the lowest and lower MPCE group. These under-developed regions will be adversely get affected they are one of the densely populated regions of the country and the incidence of poverty is going to increase rather than decrease.



Reduction of CPRs is high in some areas and also the CPR dependence has also increased in these areas. **These are the most vulnerable regions.** And this is an alarm for the future use. These vulnerable regions are-

- Orissa (EHg)- this is the Eastern Plateau Hills and this is not a developed area, as the most of the inhabitants are the tribal people and they directly depend on these resources for the further sustenance of their life.
- UP (EHg)-This region is also one of the most vulnerable regions because this part of the state comes under rugged topography and lies in the arid region and it suffers droughts almost every year, and again this is also a poor region and the dependence on CPRs is very high as it is very limited in these regions.
- UP (MG)- The Middle Gangetic Plains of U.P is one of the most densely populated region of the country and also one of most agriculture dominated region, where CPR availability is very low, but dependence is very high. Again there is problem.
- UP (TG)-This region again faces the same problem and the incidence of poverty is very high in this region. Population pressure is also very high in this region and therefore their dependence on these resources are also very high.
- Maharashtra (EHg)-This is one of the most underdeveloped region of the country as it is resource scarce region and mostly this area is inhabited by the tribals. So; the dependence rate is also high in this region.

It is already established from the chapter four that mostly the marginalised are the worst affected by this depletion and the marginalised group mostly the landless, marginal farmers; social groups such as SCs, STs, OBCs and others are the most marginalised ones. Also, people belong to the lowest MPCE groups, and the 2<sup>nd</sup> lowest category of MPCE. Thus, CPR reduction has most adverse implications for the poor. CPR reduction in poor underdeveloped regions where poverty incidence is already very high will be worst affected by reduction of CPRs and dependence on CPRs.

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## Appendix

**Table 1.1 List of state Agro-Climatic Regions**

LIST OF STATE AGRO-CLIMATIC REGIONS	
1. ANDHRA PRADESH (DP)	2. ANDHRA PRADESH (EG)
3. ARUNACHAL PRADESH (EHm)	4. ASSAM (EHm)
5. BIHAR (MG)	6. JHARKHAND- Former Bihar (EHg)
7. GUJARAT (GC)	8. HARYANA (UG)
9. HIMACHAL PRADESH (WHm)	10. JAMMU & KASHMIR (WHm)
11. KARNATAKA (WHg)	12. KARNATAKA (DP)
13. KARNATAKA (WC)	14. KERALA (WC)
15. MADHYA PRADESH (CHg)	16. MADHYA PRADESH* (EHg)
17. MADHYA PRADESH (WHg)	18. MAHARASHTRA (EHg)
19. MAHARASHTRA (WHg)	20. MAHARASHTRA (WC)
21. MANIPUR (EHm)	22. MEGHALAYA (EHm)
23. MIZORAM (EHm)	24. NAGALAND (EHm)
25. ORISSA (EHg)	26. ORISSA (EG)
27. PUNJAB (UG)	28. RAJASTHAN (CHg)
29. RAJASTHAN (TD)	30. SIKKIM (EHm)
31. TAMIL NADU (DP)	32. TAMIL NADU (EG)
33. TAMIL NADU (WC)	34. TRIPURA (EHm)
35. UTTARAKHAND (former UP) - WHm	
36. UTTAR PRADESH (MG)	37. UTTAR PRADESH (TG)
38. UTTAR PRADESH (CHg)	39. WEST BENGAL (EHm)
40. WEST BENGAL (LG)	41. WEST BENGAL (EHg)

Source: Report No.452, Common Property Resources (1998).

Table 3. 8- Availability and reduction of Area under CPRs across state Agro-Climatic Zones.

State Agro-Climatic Zones	Estimated Reduction (in Ha)	Estimated Area CPR (in Ha)	Reduction as a % of Estimated Area	Estimated Number of Households	CPR Per 000 Households (in Ha)
Andhra Pradesh (DP )	74800	1248300	6	6291700	198.4
Andhra Pradesh (EG )	14600	806300	1.8	5641600	142.9
Assam (EHm )	6500	161300	4	3511400	45.9
Bihar (MG )	15000	499400	3	11810500	42.3
Bihar (CHg )	27800	763300	3.6	3215300	237.4
Gujarat (GC )	4100	3916500	0.1	5446800	719
Haryana (UG )	2300	122100	1.9	2538800	48.1
Himachal Pradesh (WHm )	0	340400	0	1022600	332.9
Jammu & Kashmir (WHm )	1800	113300	1.6	790700	143.3
Karnataka (WHg )	1600	833700	0.2	2958800	281.8
Karnataka (DP )	34700	655500	5.3	2812500	233.1
Karnataka (WC )	-	261400	-	1198000	218.2
Kerala (WC )	100	539200	0	4541100	118.7
Madhya Pradesh (CHg )	20200	2770400	0.7	2844100	974.1
Madhya Pradesh (EHg )	14000	4785800	0.3	6919200	691.7
Madhya Pradesh (WHg )	1300	415400	0.3	985000	421.7
Maharashtra (EHg )	26300	295000	8.9	954300	309.1
Maharashtra (WHg )	44200	2600600	1.7	8805300	295.3
Maharashtra (WC )	-	421800	-	1365100	309
Manipur (EHm )	200	43000	0.5	250500	171.7
Meghalaya (EHm )	3800	248700	1.5	345700	719.4
Mizoram (EHm )	3500	313700	1.1	71800	4369.1
Nagaland (EHm )	3700	130100	2.8	87100	1493.7
Orissa (CHg )	244300	1511600	16.2	3689200	409.7
Orissa (EG )	9400	237000	4	2655900	89.2
Punjab (UG )	2200	49000	4.5	2797100	17.5
Rajasthan (EHg )	40300	3015400	1.3	4204800	717.1
Rajasthan (TD )	22500	9694100	0.2	2032900	4768.6
Tamil Nadu (DP )	600	497000	0.1	4139500	120.1
Tamil Nadu (EG )	3600	1003100	0.4	5070800	197.8
Tamil Nadu (WC )	0	12800	0	418400	30.6
Tripura (EHm )	0	7700	0	560200	13.7
Uttar Pradesh (WHm )	2200	1374200	0.2	1942900	707.3
Uttar Pradesh (MG )	90000	875100	10.3	8623600	101.5
Uttar Pradesh (TG )	59600	780900	7.6	11752600	66.4
Uttar Pradesh (EHg )	43600	140400	31.1	680900	206.2
West Bengal (EHm )	6000	9800	61.2	1152100	8.5
West Bengal (LG )	4000	153600	2.6	7632800	20.1
West Bengal (CHg )	1800	155100	1.2	2253000	68.8
Total (all )	833300	42021900	2	1.35E+08	311.6

Source :NSS Report Number 452, 1998

Table 3.5 (ii) Change in the Percentage of Rural Women carrying out CPR related Activities.

Change in the Percentage of Rural Women Carrying out CPR related Activities ( between 1999-2000 and 2009-10)												
	any_CPR_1999_2000	any_CPR_2009_10	Change_any_CPR	Firew_CPR_1999_2000	Firew_CPR_2009_10	Change_Firew_CPR	Fish_Fruit_CPR_1999_2000	Fish_Fruit_CPR_2009_10	Change_Fish_Fruit_CPR	Bringi_water_CPR_1999_2000	bringi_water_CPR_2009_10	Change_Bringi_water_CPR
Andhra Pradesh (DP)	82.5	40.1	42.4	39.5	23.2	16.3	4.4	5.5	-1.2	74	31	43
Andhra Pradesh (EG)	87.3	57	30.3	25.5	27.2	-1.7	2.4	4.8	-2.4	84.3	46.8	37.5
Assam (EHm)	67.6	72.8	-5.2	37.1	58.9	-21.9	42.6	56.3	-13.6	39.1	19.8	19.3
Bihar (MG)	64.8	42.9	21.9	46.8	36.3	10.5	20.1	17.3	2.8	46.9	13.7	33.3
Bihar (CHg)	80.2	85.6	-5.4	61	76.7	-15.7	19.3	40.9	-21.6	67.8	54.6	13.2
Gujarat (GC)	85.4	66.5	18.9	68	53.8	14.1	10.1	16.3	-6.1	57.8	36.5	21.3
Haryana (UG)	76.3	53.9	22.4	42.7	44.6	-1.9	23.1	13	10.2	61.5	22.6	38.8
Himachal Pradesh (WHm)	82.1	68.1	14	64.8	57.5	7.3	18.6	26.2	-7.6	63.3	39.8	23.4
Jammu & Kashmir (WHm)	84.3	63.1	21.2	49	47.1	1.9	11.8	18.7	-6.9	78	49.6	28.4
Karnataka (WHg)	88.3	53.6	34.7	43.7	23.1	20.5	3.7	6.6	-2.9	81.9	42.5	39.4
Karnataka (DP)	89.3	48.4	40.9	40.2	23.3	16.9	13.8	7.2	6.6	78.9	35.4	43.4
Karnataka (WC)	91.1	35.7	55.5	45.3	26.7	18.5	26.2	6.2	20	82.7	11.2	71.4
Kerala (WC)	46.8	31.6	15.2	28	23	5	2.9	2	0.8	29.3	13.2	16
Madhya Pradesh (CHg)	86.2	71.6	14.6	56.1	47.5	8.6	21.9	15.3	6.5	75.5	59.6	15.9
Madhya Pradesh (EHg)	89.5	72	17.6	65.1	54.4	10.7	35.3	31.6	3.7	81.6	44.9	36.7
Madhya Pradesh (WHg)	88.9	76.3	12.6	41.5	54.8	-13.3	5.7	10.5	-4.7	75.7	60.8	14.9
Maharashtra (EHg)	94.4	75.9	18.5	65.4	11.5	53.9	13.8	0	13.8	93.7	74.9	18.8
Maharashtra (WHg)	84	45	39	41.6	25.9	15.7	3.7	4.4	-0.7	75.6	25.7	49.9
Maharashtra (WC)	91.9	70.3	21.6	63.1	51.9	11.2	25	9	15.9	76.2	49.1	27.1
Manipur (EHm)	87.5	69.5	18	61.1	36	25.1	61.2	43.6	17.6	65	57.5	7.5
Meghalaya (EHm)	82.7	87.7	-5	50.8	67.3	-16.4	51.3	57.9	-6.6	72.1	70.2	2
Mizoram (EHm)	93.4	94.1	-0.7	76	61.4	14.5	44.8	57.7	-12.9	87.5	87.4	0.1
Nagaland (EHm)	94	79.4	14.6	68.9	62.5	6.4	80.7	67.8	12.9	82.2	42	40.2
Orissa (CHg)	92.3	90.8	1.5	60.2	57.3	3	48.2	44.2	4.1	89	82.1	6.9
Orissa (EG)	84.8	64.8	20	32.5	33.2	-0.7	14.6	23.2	-8.6	82.5	56.4	26.1
Punjab (UG)	39.9	21.2	18.7	34.8	18.6	16.2	9.6	5	4.6	6.7	2.7	4
Rajasthan (EHg)	87.6	82.3	5.3	64.1	65.2	-1.1	14.8	13.9	0.9	71.5	65.3	6.2
Rajasthan (TD)	79.7	67.6	12.1	45.3	56.9	-11.6	6.2	13	-6.7	65.1	40.8	24.2
Tamil Nadu (DP)	82.1	59.6	22.5	47.9	39.6	8.3	5.2	4.3	0.9	74.4	44.8	29.6
Tamil Nadu (EG)	86.8	43.2	43.6	44.3	27.5	16.8	3.9	5	-1.1	81.6	27.6	54
Tamil Nadu (WC)	76.6	36.8	39.8	21.2	10.3	10.9	2.2	0.4	1.7	70.6	35.5	35.1
Tripura (EHm)	87.8	64.3	23.5	27.8	39.1	-11.3	18.2	29.1	-10.9	77.6	56.4	21.2
Uttar Pradesh (WHm)	77.1	77	0.1	64.5	64.5	0	10.1	52.4	-42.2	56.6	32.6	24
Uttar Pradesh (MG)	57.2	46.6	10.6	37.2	33.8	3.4	13.7	8.1	5.6	33.6	23.4	10.2
Uttar Pradesh (TG)	57.4	48.8	8.6	32.5	37.5	-5	9.7	13.9	-4.2	42.5	26.7	15.8
Uttar Pradesh (EHg)	86.1	76.5	9.6	61.8	63.5	-1.7	3.7	51.5	-47.8	83	70.4	12.7
West Bengal (EHm)	71.6	74.9	-3.3	58.7	66.9	-8.2	39.6	47.9	-8.3	35.8	49.3	-13.5
West Bengal (LG)	85.6	83.3	2.3	55.7	58.4	-2.6	36.3	35.4	0.9	76.2	73.1	3.1
West Bengal (CHg)	86.1	86	0.1	73	72.2	0.8	29.8	56.7	-26.9	63.6	52.5	11.1
Total (all)	73.2	57.9	15.2	45.5	42.4	3	17.4	18.8	-1.4	57.7	36.7	21

Computed From NSS 55th and 66th Rounds ( Employment and Unemployment Situation in India)



Table 4.3.5. Distribution of Estimated No. Of Rural Women belonging to different Land Classes carrying out any type of CPR related Activity State wise during the year 2009-10.

States		Classes of Operational Holding					Total
		Landless	Marginal	Small	Semi Large	Large	
JAMMU & KASHMIR	No CPR Activity	567881	2662		704		571247
	With any CPR activity	974097	1104		0		975201
	Total	1541978	3766		704		1546448
HIMACHAL PRADESH	No CPR Activity	187968	1103	0			189071
	With any CPR activity	382671	0	773			383444
	Total	570639	1103	773			572515
PUNJAB	No CPR Activity	3420179	8673	8378	21402		3458632
	With any CPR activity	927811	0	0	0		927811
	Total	4347990	8673	8378	21402		4386443
CHANDIGARH	No CPR Activity	36781					36781
	With any CPR activity	304					304
	Total	37085					37085
UTTARAKHAND	No CPR Activity	294728	0	950			295678
	With any CPR activity	733467	2298	0			735765
	Total	1028195	2298	950			1031443
HARYANA	No CPR Activity	1584535	467	3952	735		1589689
	With any CPR activity	1826109	1305	7889	1351		1836654
	Total	3410644	1772	11841	2086		3426343
DELHI	No CPR Activity	141977					141977
	With any CPR activity	22129					22129
	Total	164106					164106
RAJASTHAN	No CPR Activity	1890643	26959	289	812		1918703
	With any CPR activity	6276128	13618	3121	3461		6296328
	Total	8166771	40577	3410	4273		8215031
UTTAR PRADESH	No CPR Activity	15218713	22026	32933	817		1.50E+07
	With any CPR activity	14504851	2811	501	0		1.50E+07
	Total	29723564	24837	33434	817		3.00E+07
BIHAR	No CPR Activity	9801698	14566	0			9816264
	With any CPR activity	7063101	0	72			7063173
	Total	16864799	14566	72			1.70E+07
SIKKIM	No CPR Activity	23482					23482
	With any CPR activity	28864					28864
	Total	52346					52346
ARUNACHAL PRADESH	No CPR Activity	14584	0	0	130	0	14714
	With any CPR activity	85474	165	931	0	106	86676

	Total	100058	165	931	130	106	101390
NAGALAND	No CPR Activity	27701					27701
	With any CPR activity	106676					106676
	Total	134377					134377
MANIPUR	No CPR Activity	85219	72	0			85291
	With any CPR activity	191426	1524	970			193920
	Total	276645	1596	970			279211
MIZORAM	No CPR Activity	2806	70				2876
	With any CPR activity	45907	309				46216
	Total	48713	379				49092
TRIPURA	No CPR Activity	232526					232526
	With any CPR activity	418562					418562
	Total	651088					651088
MEGHALAYA	No CPR Activity	23246	111				23357
	With any CPR activity	166099	0				166099
	Total	189345	111				189456
ASSAM	No CPR Activity	1327699	911	0			1328610
	With any CPR activity	3785095	14007	2396			3801498
	Total	5112794	14918	2396			5130108
WEST BENGAL	No CPR Activity	2737079	1645	592			2739316
	With any CPR activity	12140024	3625	2257			1.20E+07
	Total	14877103	5270	2849			1.50E+07
JHARKHAND	No CPR Activity	617147	334	2815			620296
	With any CPR activity	3470819	332	0			3471151
	Total	4087966	666	2815			4091447
ORISSA	No CPR Activity	1695989	2439	1921			1700349
	With any CPR activity	5750866	4434	0			5755300
	Total	7446855	6873	1921			7455649
CHHATTISGARH	No CPR Activity	668776	678				669454
	With any CPR activity	1012837	0				1012837
	Total	1681613	678				1682291
MADHYA PRADESH	No CPR Activity	1954511	0	1594	1356	0	1957461
	With any CPR activity	5668003	16493	21333	0	636	5706465
	Total	7622514	16493	22927	1356	636	7663926
GUJARAT	No CPR Activity	2092518	0	0	1578		2094096
	With any CPR activity	4164768	105	341	197		4165411
	Total	6257286	105	341	1775		6259507
DAMAN & DIU	No CPR Activity	5305					5305
	With any CPR activity	18490					18490
	Total	23795					23795
DADRA & NAGAR	No CPR Activity	8111					8111

HAVELI	With any CPR activity	43765					43765
	Total	51876					51876
MAHARASHTRA	No CPR Activity	3699712	712	319			3700743
	With any CPR activity	3528620	1517	10418			3540555
	Total	7228332	2229	10737			7241298
ANDHRA PRADESH	No CPR Activity	3422522	796	0	1780		3425098
	With any CPR activity	3375740	13824	88	0		3389652
	Total	6798262	14620	88	1780		6814750
KARNATAKA	No CPR Activity	2517907	19772	20472	5215	2154	2565520
	With any CPR activity	2461344	28800	121	949	0	2491214
	Total	4979251	48572	20593	6164	2154	5056734
	No CPR Activity	135611					135611
GOA	With any CPR activity	87123					87123
	Total	222734					222734
	No CPR Activity	4704					4704
LAKSHADWEEP	With any CPR activity	362					362
	No	5066					5066
	Total	3371226	2128				3373354
	With any CPR activity	1556119	555				1556674
	Total	4927345	2683				4930028
	No CPR Activity	2471600	1984				2473584
KERALA	With any CPR activity	2392168	0				2392168
	Total	4863768	1984				4865752
	No CPR Activity	29496	1607				31103
	With any CPR activity	13376	0				13376
	Total	42872	1607				44479
TAMIL NADU	No CPR Activity	12180		0			12180
	With any CPR activity	26368		36			26404
	Total	38548		36			38584

Source: NSSO,66th Round (2009-10).

Table 4.3. 6 - State wise Distribution of Estimated No. Of Rural Women Carrying out Any CPR related Activity Among Various Social-Groups during the year 2009-10.

STATES		SOCIAL GROUPS				TOTAL
		STs	SCs	OBCs	Others	
JAMMU & KASHMIR	No CPR Activity	7777	33851	77691	451414	570733
	With any CPR activity	54013	137328	136597	647264	975202
	TOTAL	61790	171179	214288	1098678	1545935
HIMACHAL PRADESH	No CPR Activity	5368	46329	22991	114383	189071
	With any CPR activity	29725	130476	30671	192571	383443
	TOTAL	35093	176805	53662	306954	572514
PUNJAB	No CPR Activity	14666	1293338	488457	1662172	3458633
	With any CPR activity	0	533910	133549	260352	927811
	TOTAL	14666	1827248	622006	1922524	4386444
CHANDIGARH	No CPR Activity		16303	2034	18443	36780
	With Any CPR Activity	0	0	304	304	
	TOTAL		16303	2034	18747	37084
UTTARAKHAND	No CPR Activity	13230	43941	82448	156059	295678
	With any CPR activity	56896	162177	112228	404465	735766
	TOTAL	70126	206118	194676	560524	1031444
HARYANA	No CPR Activity	857	299542	475629	813661	1589689
	With any CPR activity	3615	660214	572743	600081	1836653
	TOTAL	4472	959756	1048372	1413742	3426342
DELHI	No CPR Activity		79835	32594	29548	141977
	With any CPR activity		22129	0	0	22129
	TOTAL		101964	32594	29548	164106
RAJASTHAN	No CPR Activity	116466	479400	944572	378265	1918703
	With any CPR activity	955588	1455709	2818230	1066198	6295725
	TOTAL	1072054	1935109	3762802	1444463	8214428
UTTAR PRADESH	No CPR Activity	44835	2774207	8287401	4168045	1.5E+07
	With any CPR activity	71052	4717510	7309271	2410331	1.5E+07
	TOTAL	115887	7491717	1.6E+07	6578376	3E+07
BIHAR	No CPR Activity	341159	1492183	5658544	2309401	9801287
	With any CPR activity	188960	2039969	4009423	806389	7044741
	TOTAL	530119	3532152	9667967	3115790	1.7E+07
SIKKIM	No CPR Activity	5942	2979	11362	3199	23482
	With any CPR activity	8144	2206	18280	234	28864
	TOTAL	14086	5185	29642	3433	52346
ARUNACHAL PRADESH	No CPR Activity	5529	561	761	7863	14714
	With any CPR activity	59535	1413	4440	21096	86484
	TOTAL	65064	1974	5201	28959	101198
NAGALAND	No CPR Activity	26832	0	0	869	27701
	With any CPR activity	103203	74	537	2863	106677
	TOTAL	130035	74	537	3732	134378
MANIPUR	No CPR Activity	16605	1193	64500	2994	85292
	With any CPR activity	97774	8146	83655	4345	193920
	TOTAL	114379	9339	148155	7339	279212
MIZORAM	No CPR Activity	2876	0			2876
	With any CPR activity	46198	18			46216
	TOTAL	49074	18			49092
TRIPURA	No CPR Activity	33617	68850	52561	77499	232527
	With any CPR activity	188208	88472	61596	80286	418562
	TOTAL	221825	157322	114157	157785	651089
MEGHALAYA	No CPR Activity	21566		0	1790	23356
	With any CPR activity	150522		1781	13797	166100
	TOTAL	172088		1781	15587	189456
ASSAM	No CPR Activity	136585	122373	414315	654471	1327744
	With any CPR activity	616802	515990	852563	1812142	3797497
	TOTAL	753387	638363	1266878	2466613	5125241
WEST BENGAL	No CPR Activity	118228	745679	229877	1645532	2739316
	With any CPR activity	880169	3657312	742499	6865927	1.2E+07

	TOTAL	998397	4402991	972376	8511459	1.5E+07
JHARKHAND	No CPR Activity	96442	82367	317202	121483	617494
	With any CPR activity	1178963	618676	1375533	294902	3468074
	TOTAL	1275405	701043	1692735	416385	4085568
ORISSA	No CPR Activity	67356	284486	638382	710124	1700348
	With any CPR activity	1197927	1179651	2091157	1286566	5755301
	TOTAL	1265283	1464137	2729539	1996690	7455649
CHHATTISGARH	No CPR Activity	185887	75404	282049	126115	669455
	With any CPR activity	379216	158209	316930	158482	1012837
	TOTAL	565103	233613	598979	284597	1682292
MADHYA PRADESH	No CPR Activity	298808	356080	726589	575572	1957049
	With any CPR activity	1392630	1109240	2345334	859078	5706282
	TOTAL	1691438	1465320	3071923	1434650	7663331
GUJARAT	No CPR Activity	215050	160823	813505	901412	2090790
	With any CPR activity	1034228	514814	1925684	668578	4143304
	TOTAL	1249278	675637	2739189	1569990	6234094
DAMAN & DIU	No CPR Activity	930	56	2636	1683	5305
	With any CPR activity	5959	1282	9608	1642	18491
	TOTAL	6889	1338	12244	3325	23796
DADRA & NAGAR HAVELI	No CPR Activity	3611	1414	0	3086	8111
	With any CPR activity	41796	1188	90	692	43766
	TOTAL	45407	2602	90	3778	51877
MAHARASHTRA	No CPR Activity	267078	562442	1144281	1726943	3700744
	With any CPR activity	397776	515687	1396473	1230618	3540554
	TOTAL	664854	1078129	2540754	2957561	7241298
ANDHRA PRADESH	No CPR Activity	78087	623163	1483571	1240278	3425099
	With any CPR activity	259364	705477	1648465	776345	3389651
	TOTAL	337451	1328640	3132036	2016623	6814750
KARNATAKA	No CPR Activity	110042	374085	1242859	838533	2565519
	With any CPR activity	144121	509191	1080914	756988	2491214
	TOTAL	254163	883276	2323773	1595521	5056733
GOA	No CPR Activity	34214	3629	9274	88495	135612
	With any CPR activity	44902	2284	11460	28477	87123
	TOTAL	79116	5913	20734	116972	222735
LAKSHADWEEP	No CPR Activity	4704				4704
	With any CPR activity	362				362
	TOTAL	5066				5066
KERALA	No CPR Activity	29207	241361	2154872	947915	3373355
	With any CPR activity	33939	205351	946476	370908	1556674
	TOTAL	63146	446712	3101348	1318823	4930029
TAMIL NADU	No CPR Activity	19727	457171	1935930	60757	2473585
	With any CPR activity	25737	642612	1703327	20492	2392168
	TOTAL	45464	1099783	3639257	81249	4865753
PONDICHERRY	No CPR Activity		4446	19221	7435	31102
	With any CPR activity		1927	11449	0	13376
	TOTAL		6373	30670	7435	44478
ANDAMAN & NICOBAR ISLANDS	No CPR Activity	489		2898	8793	12180
	With any CPR activity	5314		3372	17718	26404
	TOTAL	5803		6270	26511	38584

Source: NSSO, 66<sup>th</sup> Round (2009—10).

Table 4.3.7 Estimated number of Rural Women Carrying out Any one Type of CPR Activity belonging to different Educational Level across different States during the year 2009-10.

STATES		GENERAL EDUCATION					TOTAL
		Illiterate	Primary	Middle	Secondary	Higher Secondary and Above	
JAMMU & KASHMIR	No CPR Activity	351630	49513	73062	66058	30983	571246
	With any CPR activity	616552	147388	121426	60392	29444	975202
	Total	968182	196901	194488	126450	60427	1546448
HIMACHAL PRADESH	No CPR Activity	49076	33204	20800	40616	45375	189071
	With any CPR activity	101385	119279	70051	55572	37157	383444
	Total	150461	152483	90851	96188	82532	572515
PUNJAB	No CPR Activity	1306961	764017	353265	631499	402891	3458633
	With any CPR activity	526793	232943	62936	78135	27004	927811
	Total	1833754	996960	416201	709634	429895	4386444
CHANDIGARH	No CPR Activity	2376	21499	282	4695	7929	36781
	With any CPR activity	152	0	0	152	0	304
	Total	2528	21499	282	4847	7929	37085
UTTARAKHAND	No CPR Activity	135908	50996	16602	22091	70081	295678
	With any CPR activity	346870	176429	96416	46913	69137	735765
	Total	482778	227425	113018	69004	139218	1031443
HARYANA	No CPR Activity	638130	336941	192106	243152	179361	1589690
	With any CPR activity	938615	484217	162167	140163	111491	1836653
	Total	1576745	821158	354273	383315	290852	3426343
DELHI	No CPR Activity	76117	30767	12896	5760	16437	141977
	With any CPR activity	1852	9357	10844	77	0	22130
	Total	77969	40124	23740	5837	16437	164107
RAJASTHAN	No CPR Activity	1176300	389845	143349	141688	67521	1918703
	With any CPR activity	4297479	1212400	562813	120059	103577	6296328
	Total	5473779	1602245	706162	261747	171098	8215031
UTTAR PRADESH	No CPR Activity	8416733	3114050	1896840	682507	1164359	15274489
	With any CPR activity	10309646	2053257	1431379	314858	399023	14508163
	Total	18726379	5167307	3328219	997365	1563382	29782652
BIHAR	No CPR Activity	6015196	1747773	881509	807289	363895	9815662
	With any CPR activity	5909155	676133	184246	193610	100030	7063174
	Total	11924351	2423906	1065755	1000899	463925	16878836
SIKKIM	No CPR Activity	3180	9933	4270	3133	2965	23481
	With any CPR activity	6436	18153	3067	901	307	28864
	Total	9616	28086	7337	4034	3272	52345
ARUNACHAL PRADESH	No CPR Activity	3317	4393	1885	3334	1786	14715
	With any CPR activity	37954	22530	11685	9396	5112	86677
	Total	41271	26923	13570	12730	6898	101392
NAGALAND	No CPR Activity	1425	13941	5573	3330	3433	27702
	With any CPR activity	22570	38208	21339	15544	9014	106675

	Total	23995	52149	26912	18874	12447	134377
MANIPUR	No CPR Activity	11768	12421	24686	22421	13996	85292
	With any CPR activity	54652	35844	50800	34730	17893	193919
	Total	66420	48265	75486	57151	31889	279211
MIZORAM	No CPR Activity	254	214	1195	1013	200	2876
	With any CPR activity	3909	22859	16756	1205	1486	46215
	Total	4163	23073	17951	2218	1686	49091
TRIPURA	No CPR Activity	50351	103467	60314	10899	6612	231643
	With any CPR activity	121614	225246	63628	5231	2843	418562
	Total	171965	328713	123942	16130	9455	650205
MEGHALAYA	No CPR Activity	4469	9239	3980	3103	2566	23357
	With any CPR activity	20085	87775	34100	20318	3821	166099
	Total	24554	97014	38080	23421	6387	189456
ASSAM	No CPR Activity	316403	435732	338796	144580	93098	1328609
	With any CPR activity	1090462	1642185	793665	216686	57811	3800809
	Total	1406865	2077917	1132461	361266	150909	5129418
WEST BENGAL	No CPR Activity	820765	1054817	447511	262956	153267	2739316
	With any CPR activity	5173811	5014038	1295761	505573	156725	12145908
	Total	5994576	6068855	1743272	768529	309992	14885224
JHARKHAND	No CPR Activity	268719	74995	124032	106537	46012	620295
	With any CPR activity	2515007	523155	276032	95917	60546	3470657
	Total	2783726	598150	400064	202454	106558	4090952
ORISSA	No CPR Activity	304662	506536	434201	288600	165507	1699506
	With any CPR activity	2755435	1486378	1030102	318561	164824	5755300
	Total	3060097	1992914	1464303	607161	330331	7454806
CHHATTISGARH	No CPR Activity	239070	263499	59130	49243	58513	669455
	With any CPR activity	400121	350747	95607	103838	62525	1012838
	Total	639191	614246	154737	153081	121038	1682293
MADHYA PRADESH	No CPR Activity	814953	694104	183293	122795	142316	1957461
	With any CPR activity	3165642	1500959	642282	277243	120113	5706239
	Total	3980595	2195063	825575	400038	262429	7663700
GUJARAT	No CPR Activity	740838	487617	406917	269438	189286	2094096
	With any CPR activity	1991463	1192376	647365	198832	135375	4165411
	Total	2732301	1679993	1054282	468270	324661	6259507
DAMAN & DIU	No CPR Activity	0	1047	581	803	2873	5304
	With any CPR activity	1811	4178	6680	4544	1277	18490
	Total	1811	5225	7261	5347	4150	23794
DADRA & NAGAR HAVELI	No CPR Activity	4297	1065	897	1311	541	8111
	With any CPR activity	27729	4446	8042	3194	354	43765
	Total	32026	5511	8939	4505	895	51876
MAHARASHTRA	No CPR Activity	964193	700273	797272	604109	634896	3700743
	With any CPR activity	1246463	746006	951532	422691	173863	3540555
	Total	2210656	1446279	1748804	1026800	808759	7241298
ANDHRA PRADESH	No CPR Activity	1471904	826322	390948	490111	245812	3425097

	With any CPR activity	2027986	734929	323973	176167	126596	3389651
	Total	3499890	1561251	714921	666278	372408	6814748
KARNATAKA	No CPR Activity	943372	532227	397077	511287	181556	2565519
	With any CPR activity	1254400	526037	350111	222288	138377	2491213
	Total	2197772	1058264	747188	733575	319933	5056732
GOA	No CPR Activity	23310	17969	7196	46577	40559	135611
	With any CPR activity	43583	14476	24196	4605	263	87123
	Total	66893	32445	31392	51182	40822	222734
LAKSHADWEEP	No CPR Activity	826	1042	1820	775	241	4704
	With any CPR activity	72	95	117	78	0	362
	Total	898	1137	1937	853	241	5066
KERALA	No CPR Activity	242177	880199	1176767	567619	506592	3373354
	With any CPR activity	124537	497506	533396	285123	116112	1556674
	Total	366714	1377705	1710163	852742	622704	4930028
TAMIL NADU	No CPR Activity	593195	723249	511517	302561	343062	2473584
	With any CPR activity	800596	695829	460419	293878	141447	2392169
	Total	1393791	1419078	971936	596439	484509	4865753
PONDICHERRY	No CPR Activity	5445	7854	3205	8331	6269	31104
	With any CPR activity	582	4696	4991	2931	176	13376
	Total	6027	12550	8196	11262	6445	44480
ANDAMAN & NICOBAR IS	No CPR Activity	2659	2251	2956	2842	1473	12181
	With any CPR activity	6396	10318	6271	1897	1521	26403
	Total	9055	12569	9227	4739	2994	38584

Source: NSS 66<sup>th</sup> Round (2009-10).



Table 4.3.8 State wise Distribution of Estimated No. Rural Women Carrying Out Any One Type of CPR Activity belonging to different MPCE groups during the year 2009-10.

STATES		MPCE: Rs. 450 and Below	MPCE: Rs. 450 - 900	MPCE: Rs. 900- 5000	MPCE: Rs. 5000-10000	MPCE(Rs 10,000 & above)	TOTAL
JAMMU & KASHMIR	No CPR Activity	3836	185866	380738	807		571247
	With any CPR activity	34502	399364	539190	2145		975201
	Total	38338	585230	919928	2952		1546448
HIMACHAL PRADESH	No CPR Activity	2607	26195	153830	6439	0	189071
	With any CPR activity	3835	108715	269268	659	967	383444
	Total	6442	134910	423098	7098	967	572515
PUNJAB	No CPR Activity	8493	595344	2788461	56203	10131	3458632
	With any CPR activity	8802	468886	450123	0	0	927811
	Total	17295	1064230	3238584	56203	10131	4386443
CHANDIGARH	No CPR Activity			36527	253		36780
	With any CPR activity			304	0		304
	Total			36831	253		37084
UTTARAKHAND	No CPR Activity	1278	93254	200339	807		295678
	With any CPR activity	13367	396947	325451	0		735765
	Total	14645	490201	525790	807		1031443
HARYANA	No CPR Activity	0	308982	1251893	27799	1015	1589689
	With any CPR activity	35373	620634	1180542	105	0	1836654
	Total	35373	929616	2432435	27904	1015	3426343
DELHI	No CPR Activity		13083	128894			141977
	With any CPR activity		0	22129			22129
	Total		13083	151023			164106
RAJASTHAN	No CPR Activity	0	653831	1261206	3666		1918703
	With any CPR activity	157506	3160121	2970089	8612		6296328
	Total	157506	3813952	4231295	12278		8215031
UTTAR PRADESH	No CPR Activity	663071	8773925	5817040	20454		15274490
	With any CPR activity	1427203	10053047	3027913	0		14508163
	Total	2090274	18826972	8844953	20454		29782653
BIHAR	No CPR Activity	1626811	5962562	2226462	429		9816264
	With any CPR activity	1479680	4843392	740101	0		7063173
	Total	3106491	10805954	2966563	429		16879437
SIKKIM	No CPR Activity	0	5120	18361			23481
	With any CPR activity	25	19948	8891			28864
	Total	25	25068	27252			52345
ARUNACHAL PRADESH	No CPR Activity	738	3491	10486			14715
	With any CPR	7620	41719	37337			86676

	activity						
	Total	8358	45210	47823			101391
NAGALAND	No CPR Activity		1476	26164	62		27702
	With any CPR activity		10097	96579	0		106676
	Total		11573	122743	62		134378
MANIPUR	No CPR Activity	919	41598	42774			85291
	With any CPR activity	470	114541	78910			193921
	Total	1389	156139	121684			279212
MIZORAM	No CPR Activity		979	1897			2876
	With any CPR activity		18359	27857			46216
	Total		19338	29754			49092
TRIPURA	No CPR Activity	0	106390	126124	13		232527
	With any CPR activity	3756	215480	199268	58		418562
	Total	3756	321870	325392	71		651089
MEGHALAYA	No CPR Activity	0	7598	15758			23356
	With any CPR activity	2233	97260	66607			166100
	Total	2233	104858	82365			189456
ASSAM	No CPR Activity	33090	737487	558032			1328609
	With any CPR activity	190066	2335388	1276044			3801498
	Total	223156	3072875	1834076			5130107
WEST BENGAL	No CPR Activity	40257	1449664	1249380	15		2739316
	With any CPR activity	863207	8244808	3037265	628		12145908
	Total	903464	9694472	4286645	643		14885224
JHARKHAND	No CPR Activity	42218	363068	215010			620296
	With any CPR activity	639961	2250163	581027			3471151
	Total	682179	2613231	796037			4091447
ORISSA	No CPR Activity	114965	1003826	581558	0		1700349
	With any CPR activity	1081637	3515630	1157701	332		5755300
	Total	1196602	4519456	1739259	332		7455649
CHHATTISGARH	No CPR Activity	119672	347449	201639	693		669453
	With any CPR activity	314495	506948	191211	183		1012837
	Total	434167	854397	392850	876		1682290
MADHYA PRADESH	No CPR Activity	101477	950693	903807	1396	89	1957462
	With any CPR activity	1230394	3182693	1293378	0	0	5706465
	Total	1331871	4133386	2197185	1396	89	7663927
GUJARAT	No CPR Activity	30273	544410	1513374	3628	2410	2094095
	With any CPR activity	167574	2018327	1978233	1277	0	4165411
	Total	197847	2562737	3491607	4905	2410	6259506
DAMAN & DIU	No CPR Activity		0	5144	160		5304
	With any CPR activity		5130	13361	0		18491
	Total		5130	18505	160		23795

DADRA & NAGAR HAVELI	No CPR Activity	2061	434	5617			8112
	With any CPR activity	2061	35590	6114			43765
	Total	4122	36024	11731			51877
MAHARASHTRA	No CPR Activity	118543	1335301	2240536	6363		3700743
	With any CPR activity	139762	1809566	1588946	2281		3540555
	Total	258305	3144867	3829482	8644		7241298
ANDHRA PRADESH	No CPR Activity	49093	1038690	2333125	4190		3425098
	With any CPR activity	138186	1731686	1507540	12240		3389652
	Total	187279	2770376	3840665	16430		6814750
KARNATAKA	No CPR Activity	223773	1067700	1273655		391	2565519
	With any CPR activity	330314	1393542	767358		0	2491214
	Total	554087	2461242	2041013		391	5056733
GOA	No CPR Activity	0	7352	127265		994	135611
	With any CPR activity	2148	17644	67331		0	87123
	Total	2148	24996	194596		994	222734
LAKSHADWEEP	No CPR Activity		664	4036	4		4704
	With any CPR activity		0	362	0		362
	Total		664	4398	4		5066
KERALA	No CPR Activity	73128	778496	2423088	86684	11958	3373354
	With any CPR activity	39997	434762	1063956	8022	9937	1556674
	Total	113125	1213258	3487044	94706	21895	4930028
TAMIL NADU	No CPR Activity	161007	932029	1370060	9917	572	2473585
	With any CPR activity	120590	1365376	905733	468	0	2392167
	Total	281597	2297405	2275793	10385	572	4865752
PONDICHERRY	No CPR Activity		1998	28856	249		31103
	With any CPR activity		2726	10649	0		13375
	Total		4724	39505	249		44478
ANDAMAN & NICOBAR ISLANDS	No CPR Activity		218	11935		27	12180
	With any CPR activity		3382	23022		0	26404
	Total		3600	34957		27	38584

Source: NSS 66<sup>th</sup> Round (2009-10).

Table 4.3.9 Collection of Firewood across Operational Holding Classes

		<b>Land Cultivated Classes</b>				
		Landless	Margin -al	Small	Semi Large	Large
Free Collection of Firewood,etc	no cpr	99.66	0.18	0.11	0.04	0.00
	any cpr	99.82	0.11	0.06	0.01	0.00
	Total	99.73	0.15	0.09	0.03	0.00

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table.4.3.10 Free collection of firewood Across Social Groups ; All India

	<b>Social Groups</b>				<b>Total</b>	
	STs	SCs	OBCs	Others		
no cpr	5.37	18.78	44.24	31.61	100	
any cpr	12.33	25.41	37.17	25.09	100	
Total	8.32	21.59	41.24	28.84	100	
	Total	99.73	0.15	0.09	0.03	0.00

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.11 Comparison between General Education Levels and Collection of Fuel wood; All India Level (in %).

	<b>GENERAL EDUCATION</b>				
	Illiterate	Primary	Middle	Secondary	Higher Secondary and Above
No CPR Activity	43.18	23.6	15.64	9.98	7.6
Any CPR Activity	59.26	24.31	10.41	3.98	2.05
Total	50	23.9	13.42	7.43	5.25

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.12: Collection of Fuel wood across different MPCE classes; All India Level (in %).

	MPCE Classes				
	MPCE: Rs. 450 and Below	MPCE: Rs. 450 - 900	MPCE: Rs. 900- 5000	MPCE: Rs. 5000-10000	MPCE: Rs. 10000 and Above
no cpr	6.185	48.768	44.704	0.302	0.041
any cpr	11.038	59.579	29.348	0.027	0.007
Total	8.244	53.355	38.189	0.185	0.027

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.13 Free collection of Fish and Fruits Among different classes of land Holding; All India Level (in %).

	Land Cultivated Classes				
	Landless	Marginal	Small	Semi Large	Large
No CPR Activity	99.71	0.16	0.09	0.03	0
Any CPR Activity	99.83	0.11	0.06	0	0
Total	99.73	0.15	0.09	0.03	0

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.14: Free Collection of Fish and Fruits among Social Groups; All India Level (in %).

	<b>Social Groups</b>			
	STs	SCs	OBCs	Others
No CPR Activity	6.54	20.81	43.72	28.93
Any CPR Activity	16.12	24.8	30.63	28.45
Total	8.34	21.56	41.25	28.84

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.15: Free Collection of Fish and Fruits among Categories of General Education; All India Level (in %).

	<b>Levels Of Education</b>				
	Illiterate	Primary	Middle	Secondary	Higher Secondary and Above
No CPR Activity	48.16	23.45	14.1	8.27	6.01
Any CPR Activity	57.74	26	10.45	3.81	2
Total	49.97	23.93	13.41	7.43	5.25

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.16 Free collection of Fish & Fruit among different MPCE classes; All India Level (in %).

MPCE Classes						
	MPCE: Rs. 450 and Below	MPCE: Rs. 450 - 900	MPCE: Rs. 900- 5000	MPCE: Rs. 5000-10000	MPCE: Rs. 10000 and Above	
No CPR Activity	7.04	51.8	40.91	0.22	0.03	
Any CPR Activity	13.43	60.09	26.44	0.04	0.01	
total	8.25	53.36	38.18	0.19	0.03	

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.17: Rural Women participation in fetching water from outside the household premises among Different Land Holding Classes; All India Level (in %).

	Land Cultivated classes ( in Percentage)					Total
	Landless	Marginal	Small	Semi Large	Large	
no cpr	99.69	0.16	0.11	0.04	0	100
any cpr	99.81	0.13	0.05	0.01	0	100
Total	99.73	0.15	0.09	0.03	0	100

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.18 Rural Women Fetching Water from outside the household premises among different Social Groups; All India Level (in %)

	Social Groups ( in Percentage)				Total
	STs	SCs	OBCs	Others	
no cpr	5.07	19.71	44.53	30.69	100
any cpr	14	24.81	35.56	25.62	100
total	8.34	21.59	41.24	28.83	100

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.19 Rural Women Fetching Water from CPRs among categories of education; All India Level (in %).

	Educational Levels				
	Illiterate	Primary	Middle	Secondary	Higher Secondary and Above
no cpr	48.34	22.61	13.64	8.75	6.66
any cpr	52.88	26.16	13	5.14	2.82
total	50.01	23.91	13.41	7.42	5.25

Source: NSSO 66<sup>th</sup> Round (2009-10).

Table 4.3.20: Rural Women Fetching Water from outside the household premises belonging to different MPCE classes at the All India Level (in %).

MPCE CLASSES					
	MPCE: Rs. 450 and Below	MPCE: Rs. 450 - 900	MPCE: Rs. 900- 5000	MPCE: Rs. 5000-10000	MPCE: Rs. 10000 and Above
no cpr	6.67	48.86	44.17	0.26	0.03
any cpr	10.92	61.19	27.83	0.05	0.01
	8.23	53.38	38.18	0.19	0.03

Source: NSSO 66<sup>th</sup> Round (2009-10).



