


Rights Based Development

Case Studies on Contemporary India



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(eds.)

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Content

Preface	vii
Introductory Remarks	ix
List of Tables	xii
List of Figures	xiii
List of Abbreviations	xiv
Introduction	1
1 Tribal Customary Laws and Women's Rights: A Case of Oraons in Jharkhand	7
- <i>Anurag Augustine Ekka</i>	
2 The Irony of Kerala Model of Development A Gender Perspective	27
- <i>Thushara Roy</i>	
3 Decentralisation and Women Empowerment : Lessons from Kerala	41
- <i>Deepthi M.U</i>	
4 Interrogating Democracy; Rights of the Marginalised: A Study of Dalit Jan Sunwais	59
- <i>Ramkumar Thakur</i>	
5 Policy of Reservation and Politics of Presence : Dalits in the Panchayats of Maharashtra	77
- <i>Sushil Kamble</i>	
6 Role of Panchayats in the Promotion of Child Rights in Kerala:	85
- <i>Rahul S.</i>	
7 Right to 'State - Society - Synergys': Strategies Employed by CBOs in Kerala	103
- <i>Jyothi S. Nair</i>	
8 Contemporary Discourse of Development: Inclusion, Participation and Empowerment	121
- <i>Shailesh</i>	
9 Kerala Ombudsman: A Study Based on Human Rights Approach	141
- <i>Naufal Konnakattil</i>	
10 MGNREGS in Kerala: Right to Employment and Dignity of Rural Women	153
- <i>Sainudeen A.</i>	
11 Rights of Domestic Migrants in Kerala : Problems and Prospects	165
- <i>Srikanth A.</i>	
12 Climate Change and Right to Live : The Case of Women and Children	179
- <i>Shilujas M.</i>	

Notes on Editors

Notes on Contributors

List of Tables

No.	Title	Page
2.1	Number of Crimes against Women	31
3.1	Indicators used to show the level of Empowerment	47
3.2	General Information of Desamangalam Grama Panchayat	48
3.3	Age composition of Respondents	48
3.4	Marital Status of the Respondents	48
3.5	Religion and Caste of the Respondents	49
3.6	Education Status of the Respondents	53
3.7	Health Issues of the Respondents	55
3.8	Mehtods of Family Planning	55
5.1	Category wise Representation in Local Self-Government(Maharashtra)	80
5.2	Village with Dalit Members	81
5.3	Forms of Discrimination	83
6.1	Crimes Against Children in Kerala	88
6.2	Crimes Situation; India and Kerala	89
6.3	Legislations and Role of LSGD	91
6.4	Programmes to Protect Child Rights	93
6.5	Approved Programmes and Products	97
6.6	Frequency of Visit to ICDS by Elected Representatives	99
6.7	Network of Elected Representatives with ICDS, Schools and Health Centres	99
6.8	Network with ICDS, on Indicators of Welfare in a Panchayat	100
8.1	Population of Different Villages	126
8.2	Trends in Local Governance Institution	128
8.3	Details of Poverty Indicators	129
8.4	Details of BPL and AAY Households based on 2010-11 Survey .	129
10.1	Female Participation in MGNREGA in India-State Level	161
10.2	Female Participation in MGNREGS in Kerala-District Level	162
11.1	Total Youth (18-40 years) Migrants in Kerala(2001)	169
11.2	Distribution of Migrants from major States	169
11.3	Channels of Migration	170
11.4	Wages of DML	174

Climate Change and Right to Live: The Case of Women and Children

Shilujas M.

Climate change refers to any ecological change in climate over time, or changes in long-term averages of daily weather, due to natural variability or as a result of human activities. Weather is the conditions of the atmosphere such as temperature, humidity, precipitation and cloudiness; and climate is how the atmosphere behaves over relatively long periods ranging from decades to millions of years. The major cause to climate change has been ascribed to the increased levels of Green House Gases (GHG)¹ available in the atmosphere beyond their natural levels. The inventions of last few centuries have paved the way for increase in atmospheric concentration of GHGs that led to global warming. Global Warming is the increase of Earth's average surface temperature due to effect of greenhouse gases, such as carbon dioxide emissions from burning fossil fuels or from deforestation, which trap heat that would otherwise escape from Earth.

The trend and magnitude of global warming over India during the last century has been observed to be broadly in consistent with the

global trend and magnitude. Analysis of the seasonal and annual air temperatures from 1881 to 1997 shows that there has been an increasing trend of mean annual temperature at the rate of 0.57°C per hundred years (Pant and Kumar, 1997). Surface air temperature for the period 1901-2000 indicates a significant warming of 0.4°C over these hundred years. The spatial distribution of temperature changes indicates a significant warming trend that has been observed along the West Coast, central India and interior Peninsula and over the Northeast India.

Numerous impacts of changes in climate have been increasingly observed at continental, regional and ocean scales. The year 2010 was characterised by a high number of extreme weather events, including the heat wave in Russia devastating monsoonal floods in Pakistan. Floods and droughts have become increasingly recurring phenomena in different parts of India also during the last 2-3 decades. In Mumbai, incessant rainfall of 90 cm on a single day in July 2005 resulted in a highly disastrous flood of the history. In Kerala, the increased occurrences of unprecedented and untimely heavy summer showers in recent years have caused extensive damage to rice crop, especially in the Kuttanad region. In the year 2007, the monsoon behavior in Kerala was distinctly different to that of previous years and heavy rains were received both during southwest and northeast monsoons, leading to severe floods in low lying areas. This has resulted in many human casualties and widespread damage to crops and properties. The 2015 south Indian floods resulted from heavy rainfall generated by the annual northeast monsoon in November December, 2015.

Ministry of Environment and Forest formulated a climate change action plan in June 2008. It makes clear the national perspective/ vision to face the impacts of climate change. The action plan puts forward the perspective of long-term strategies without affecting the standard of living of the people of a developing country like India. India has established a National Action Plan on Climate Change (NAPCC) with eight subsidiary "Missions", each state is now in the process of producing State Action Plans on Climate Change with recommendations on how mitigation and adaptation could be mainstreamed in to development policy. Central ministry for

Environment has instructed all states to prepare a climate change action plans taking into consideration with national action plan.

Facing Climate Change

Risks related to Climate Change are unevenly distributed and are generally greater for disadvantaged people and communities in countries at all levels of development. It will amplify existing problems and create ones for natural and human systems. It is well evidenced in climate change discourses that those who are most at risk of environmental decay include marginalized population due to geography, age and gender. Different manifestations of climate change increase challenges to women's and children's health and survival. There are more chances for women and children to suffer from problems such as diarrhea, under nutrition, malaria, and from the harmful effects of extreme weather events, including floods or drought in developing countries like India. While women and children have made comparatively small contributions to global warming, they bear the brunt of the health effects of climate change. Among these groups, pregnant and lactating women and children will be particularly vulnerable. Efforts to prevent, mitigate and address the effects of climate change should therefore include integrated action plan to address these ill-effects on women and children. Better and sustained funding of women's and children's health is essential to protect them from the negative effects of climate change. Women and children must be able to participate in climate change mitigation and adaptation strategies at the national and local level. Women form a disproportionately large share of the poor in countries all over the world including India.

Women in rural areas in developing countries are highly dependent on local natural resources for their livelihood, because of their responsibility to secure water, food and energy for cooking and heating. The effects of climate change, including drought, uncertain rainfall and deforestation, make it harder to secure these resources. By comparison with men in poor countries, women face historical disadvantages, which include limited access to decision-making and economic assets that compound the challenges of climate change. It is

a sustainable development challenge, with broad impacts not only on the environment but also on economic and social development. So, the effects of climate change will vary among regions, and between different generations, income groups and occupations as well as between women and men.

The Constitution of India suggests that the government should take steps to protect the environment and improve its quality. Our constitution further emphasizes the primary duty of each citizen to protect and improve natural environment including forests, lakes, rivers and wild animals. The development approach of local self governing institutions must be based on environmental protection. Geography of Kerala is one of the unique in world with regard to its bio-diversity. Urbanization and developmental activities both in rural and urban areas increase the pressure on environment and natural resources day-by-day.

Environmental Policy

The National Conservation Strategy and Policy statement on Environment and Development was formulated in 1992. As a sequence, Kerala also, framed the Kerala State Environment Policy in 2009. This policy has made clear the role of local self governing institutions in protecting the environment. Taking into consideration special features of Kerala, the local self governing institutions have more responsibility in protecting the nature, preventing reduction of balance of nature and control the environmental consequences. It is a fact that deforestation, destruction of mangroves, coastal destruction, degradation of tourism sectors, destruction of paddy fields and rivers owing to increased mining of sand and clay, destruction of fishery resource of fresh water and sea water due to dumping of waste, decline in the underground water etc. Also water scarcity, pollution of air, water and land, disaster owing to improper management and treatment of solid, liquid and gaseous wastes, industrial pollution, electronic waste, development initiatives overlooking environment and living species, urbanization etc. have lead to environmental degradation and thereby climate change.

Overall Case of Kerala

Even in Kerala, women are predominantly responsible for food production, leading to collection of household water and energy for heating and cooking. As climate change impacts increase, these tasks are becoming more difficult. However, women have knowledge and coping strategies that give them a practical understanding of innovation and skills to adapt to changing environmental realities as well as to contribute to the solution. These strategies to deal with climate variability are still largely an untapped resource. Additionally, women are often faced with difficulties when it comes to the general accessibility of financial resources, capacity-building activities and technologies. This often stands in the way of women's empowerment in general and their role in relation to climate change adaptation in several and mitigation in particular.

Considering gender into medium- and long-term adaptation can help to ensure that adaptation is effective and implementable on the ground. It can help to ensure that the implementation of adaptation activities will not exacerbate inequalities and other vulnerabilities, it can help to fulfill the specific needs of the most vulnerable, and it can ensure the equal participation of men and women in the decision-making and implementation phases of these activities. Women can act as agents of change at different levels of the adaptation process.

Ecofeminist writers like Vandana Shiva claim that women have a special attachment to the environment through their daily interactions and this connection has been ignored. Women in subsistence economies who produce "wealth in partnership with nature, have been experts in their own right of holistic and ecological knowledge of nature's processes". However she makes the point that "these alternative modes of knowing, which are oriented to the social benefits and sustenance needs are not recognized by the capitalist reductionist paradigm, because it fails to perceive the interconnectedness of nature". Climate change puts forward challenge to all people irrespective of their caste, religion, class, color, gender and age. At the same time, it has the power to deepen and spread all existing inequalities.

It is generally an accepted fact that the quantity, availability, intensity and time period of rain is becoming more and more irregular. The change that has occurred in the case of rain is experienced in different quantity and intensity by scheduled tribes, scheduled caste, people depending fisheries sector in coastal areas, slum dwellers, women and children. This can be seen in the case of quantity and availability of drinking water which put pressure differently in these sections. It will be entirely different from the people who belong to better social and economic status.

How Climate Change Denies Women's Right to Live

Article 21 of the Constitution of India deals with The right to live as part of fundamental rights of its citizen. It guarantees civil liberties of all citizen. Right to live is the most precious human right and forms the arc of all other rights. 'Everyone has the right to life, liberty and security of person', says the Constitution. Article 21 lays down that no person shall be deprived of his life or personal liberty except according to procedure established by law. Right to Live gives the right to live with human dignity. This includes the right to clean environment, right to pollution free air, water, education, health, livelihood, shelter and basic amenities that the state shall provide. It is clearly observed that the phenomenon of climate change and its consequences are largely and directly affect these rights of citizens mainly the weaker sections of the society including women children and thus it widely denying women's and children's right to life.

In Kerala, the number of women-led households are more than the Indian average. Women are facing poverty deeply and most of them have been engaging in agriculture activities for livelihood. Due to the miseries and inequalities generated by the issues like climate change and the decline in traditional employment sector, the domestic responsibilities of women got increased and finally made them most vulnerable community in the society. So the right of women and children to have a dignified life in the society has to be ensured. For this, implementation of new projects by analyzing the available stereotyped models of Kerala's planning would be the solution. Thus participation

of women in Committees, Working Groups, Gram Sabhas, Organizations, and Institutions has to be increased.

What is the Solution?

Women oriented understanding is essential to evaluate the possibilities and dangers resulting from climate change on the basis of social science and human knowledge. Here are a long list of positive actions such as:

- Special measures have to be adopted to solve the excess pressure on women resulting from impact and challenges of climate change owing to gender based functions and responsibilities on them assigned by each society.
- Special arrangements have to be adopted for protection, to provide more facilities and preventive measures to women against the environmental problems like flood, drought, deadly diseases and other environmental disasters.
- Plan programmes for women to provide knowledge about environment and to develop sectors of their activity identifying their ability and skill to mingle with the environment and mitigate the impact of climate change.
- Steps should be taken to provide women guidelines and training for judicious utilization of natural resources and to find out new means of livelihood.
- Ensure presence and participation of women in decision taking discussions related to mitigation of challenges posed by climate change, conservation of environment etc.
- Listen to voice of women and have to be more careful on women perspective in the discussions on climate change.

Climate Change and Children

Most important impact of climate change and global warming are the threats they create in the health sector. Scarcity of food and nutrition is another important issue. Poor children are the major victims of these issues. Along with the threats of drought, flood, and hot air

climate change speeds up the spread of communicable diseases like malaria, cholera, and diarrhea. Two-third of the communicable diseases arising out of climate change affect children. Scarcity of food and nutrition affects the health of children adversely.

As growing children have not acquired sufficient resistance power, they do not show the capacity to resist or overcome the negative situations. Children become the victims of diseases caused by insufficient availability of clean water use of unclean water for cooking, to meet primary needs, to wash utensils for cooking, and for cleaning floor affects more on the health of children. Among children who live in unhygienic conditions the persistence of worms and anemia are seen at higher rate. Like drought, flood also destroys the environment. Overflow of septic tanks and canals cause unhygienic condition in the environment. It has been observed recently that mosquito prone diseases like malaria and dengue has come back strongly. These affect children between five and ten years two times more than the adults. Children who had malaria fall sick often as they are anemic and malnourished and there are chances for irregular physical growth and inefficiency.

Malnutrition affects adversely pregnant women and feeding mothers, infants and children below five years suffer from ill health and absence of resistance power. High temperature and absence of shades cause sun burn which may lead to allergy, fever, infection etc. And children are the major portion of the patients who seek treatment. Diseases like pneumonia, lung diseases like asthma, allergy etc. has been doubled in the world by two times during the last fifteen years. Spread of these among children is at threatening speed. Children are the major victims of disasters like landslides, collapse of buildings etc resulting from climate change. Morbidity affects not only the body health of a child but his/her mental health also. All the above cited facts deny the right of children to grow as a complete social animal. Mental stress leads to learning disability in children.

What can be done for Children?

Children are the most affected segment of population when the food security is disturbed as result of crop failure, owing to climate change. Policy makers have to consider many positive steps:

- While planning, making policy and conducting discussions to settle the issues of climate change and its impacts, it has to be kept in mind among the sections who suffer more –children, poor, aged people and pregnant women - children constitute highest percentage.
- Prepare children to overcome challenges by encouraging their skills and providing opportunities for efficient intervention in solving problem. Knowledge and social relations of children must be used maximum in the local disaster management programmes of government.
- It has to be ensured that the condition at home, educational institution, and all sectors in which children intervene is conducive to keep day today activities, needs, life styles, environment and social relations of children intact in any adverse conditions.
- The initiation for change can be done by encouraging students to use bicycles in schools and colleges, participate in the aforestation, soil and water conservation activities by organising *haritha clubs*², and encouraging them to use steel, glass or ceramic containers for packing food and water.

Role of Local Governments in Mitigation Programme

Kerala has to gear up for the war against climate change. Battered by the increasing number of extreme events like high intensity rainfall, floods, drought, accelerated coastal erosion and forest fires and their impact on human life and biodiversity, the State is preparing to take up a slew of mitigation and adaptation projects in key sectors. Preparations are on to strengthen the mechanisms to build resilience and reduce the risks to the population. The Department of Environment and Climate Change (DoECC) under Environment Department was constituted in December 2010 to encourage and promote environment and Climate

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Change related activities in the Kerala. The government has initiated efforts to strengthen the Institute for Climate Change Studies (ICCS) at Kottayam and equip it to take up world-class research. The institute is to study the climate records in the high ranges of Kerala and to train functionaries of local bodies in climate change disaster risk reduction. The ICCS is to establish a greenhouse gas monitoring station in the Western Ghats. The project also involves the establishment of automatic weather stations for long-term monitoring of the climate and other environment indicators in the mountain regions, midlands and coastal lowlands.

Kerala, a State always known for its high social indicators of education, health and life expectation, and formed a larger proportion of the population with their high sex ratio, their work participation rate has been amongst the lowest in the country. But the paradox in Kerala in recent decades has been the non-availability of workers for several kinds of manual labour. Changes in the women's work participation has come through a very silent revolution, triggered by a series of poverty alleviation measures, institutional changes of organizing women in self-help groups under the *Kudumbashree*³ programme, leadership and guidance by the Local self Government, training and enterprise development, management of credit, and convergence of the activities of several departments of the government to link with each other and build synergies.

Local governments have a vital role in empowering women to face hazards of Climate Change. First, it is important to understand the women's life expertise and biological capabilities to face extreme behaviors of nature. If women are trained to identify proper livelihood means and resource management, the result will be really great. While identifying the ecological challenges and remedies related to Climate Change, gender-sensitive approach and policy making are of paramount importance. In the events of floods and natural calamities, more emphasis must be given on women.

Local government is on the front line and is responsible for taking a wide range of decisions that can make or break the success of any strategy on climate change. If they are not sensitive to the peculiar

problems of women and children, the outcome would be disastrous. Local authorities are ultimately responsible for making policy a reality. According to UNDP estimates, more than 70 per cent of climate change reduction measures and up to 90 per cent of climate change adaptation measures are undertaken by local governments across the world.

Projects delivered locally are designed to reflect local circumstances and it is these tailor-made solutions that allow us to take effective action. It is essential for these local experiences to be fed back to the highest decision-making bodies so that obstacles and potential improvements can be identified. If women's and children's issues are undermined or overlooked, the result will be partial and incomplete. Proper representation women in these decision making bodies are so highly significant. Local leaders are more innovative and ambitious. The economic and social impact of climate change on communities cannot be understated. One of the key roles local government can play in contributing to a global climate agreement is public engagement and stimulating local action. What is striking at many international climate conferences is how cut off women are from the negotiations and decision-making process.

With this experience and new input flowing from the National Livelihood Mission and Convergent action from all Departments, they took to agriculture, even as first time farmers, wherever land was remaining unproductive. They learnt farming from older persons, training and research institutions, and found their physical strength growing with more strenuous work they subjected themselves to. The other side of this positive development is more and more women are coming to brunt of Climate Change. So, the developmental planning must be focused on their vulnerability.

Conclusion

National, state or local level action plans for reducing the intensity of climate change and mitigation of its impacts can be made successful only by taking people into confidence. All micro level action plans should be prepared and implemented with the participation of people.

Though the impact of climate change is more on poor and women, awareness has to be created among people that it should not be forgotten that nobody is spared. The aftereffects of flood, land slide, cyclone thunder storm, air and water pollution, chronic diseases, contagious diseases etc has to be suffered same impact irrespective of rich and poor and men and women. Therefore, each individual, family, formal and informal groups, and local governments can do a lot against the challenges posed by climate change. *Grama Panchayats*⁴, Municipalities and Municipal Corporation can take a leadership role in evolving such groups. They have the responsibility and liability to do so. Failure to do this is injustice done to forthcoming generations.

Generally, in Kerala's social structure, men enjoy power and dominance. The local governments are the primary governmental arms that are easily accessible to women, who are marginalized from social and political currents. Local governments therefore have the added responsibility to identify women-centric issues and requirements and to find out positive and feasible ways to protect women's democratic rights. One of the specialties of the democratic decentralization of Kerala is the Women Component Plan to enhance the status of women. It is a fact that the implementation of the crucial proposal for earmarking at least 10 per cent of the developmental fund for women has enhanced the participation of women in local development activities. But, there are certain limitation in identifying women focused issues and remedies; the effects of climate change being one such issue.

A gender based budgeting and auditing are essentials for effective implementation of Women Component Plan and for protecting the rights to life of women and children. A women-specific approach is the need of the hour to face the effects of Climate Change.

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Footnotes

- ¹ Greenhouse Gases (GHG) principally include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), chlorofluorocarbons (CFCs) and ozone (O₃).
- ² Pro-nature conservation groupings of students in government schools in Kerala
- ³ The micro neighborhood collective for empowering women in Kerala
- ⁴ A village Panchayat constituted for a village or for a group of village under clause (a) of sub-section(1) of section 4