# EMPLOYMENT LOSS AND RECONSTRUCTION STRATEGIES IN KERALA-A POST FLOOD SCENARIO

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### Abstract

Unexpected flood in Kerala will have severe and significant impact on different employment sectors of the Kerala economy. People lost their employment, which is the leading factor for human development. Unemployment has been the most serious socio-economic problem of Kerala like structural and educational unemployment. Post flood impact mainly on agriculture and construction sector. Total loss is estimated at INR 9,477 Crore including wage loss of INR 7,301 Crore and inventory loss of INR 2,176 Crore. This puts the total damage and loss of the sector at INR 10,358 Crore. At the minimum, Kerala's economy lost 2.6% of its annual income (INR 17,462 Crore) due to floods, excessive rains and landslides. This estimate would go up to 6.6% (INR 26,850 Crore), if the potential damage to the agricultural sector were also considered.

**Keywords: Employment, Reconstruction, disaster management** 

### Introduction

Flood has been considered as one of the most dangerous and repeated calamity in the world. Frequent occurrences of the flood causes crucial life damage and economic loss which leads to more burdens of the economy. Many measures taken by the Government of India to lower the damage caused by flood and other disasters, but it needs more time. Use of science and technology, telecommunication and media for alarming and pre-disaster measures can be in effect to reduce the harms. To set up alarming system at the bank of rivers which can alert neighboring dwellers about rising water level can also be an affective measure to minimize the damage. Moreover, awareness programs and preparedness campaign at the flood affected areas can helps to reduce losses. Rehabilitation of the neighboring community to a safe and higher place before flood can reduce the danger to life. After the incidence, immediate supply of goods and services like medicine, food and water supply helps in quick recovery and limited loss. Kerala has faced the worst foods in over a century after experiencing unusually high monsoon rainfall in July and August 2018. Our Chief Minister said "Our aim is not merely a restoration of the state to pre-flood times, but the creation of a new Kerala". Reconstruction is an important and critical issue, a turning point in the contemporary history of the State. The flood-ravaged state has to embark on a massive reconstruction exercise—economic, social and political—to restore the status of God's Own Country.

Employment is the means by which the majority of the people meet their livelihood requirements and Kerala is no different in this respect. For the poorer sections of the population, livelihoods are sustained by resorting to a variety of employment and non-employment mechanisms. It is crucial to understand the employment and livelihoods profile of the people of Kerala, to provide a background to the assessment of the impact of floods and the reconstruction programme. Table.1 shows the loss and damages to the Kerala economy as a whole due to flood.

Table.1 - Loss and Damages

Sl.no	Details	Loss and damages	
1	Loss of human lives	372	
2	Infrastructures-by government	4441 crore	
3	Number of houses fully destroyed	7000	
4	Number of houses partially damaged	50000	
5	Loss of standing crops	56439.19ha	
6	Paddy crops	25935ha	
7	Tapioca	10189 ha	

Source: https://www.solidariteprotestante.be/wp-content/uploads

#### Literature review

Balwinder Singh et.al (2018) studied an overview on the natural tragedy of Kerala which explains the loss of human lives and Biodiversity in Gods own country. People lost their livestock animals, Infrastructure, properties, houses, agricultural crop, fish farm, pond and Industrial area. The study also observed that Indian government should create awareness among the other people on National level. Moreover every state help their neighboring state in the time being of tragedy via their skills in area of disaster management. Alphonsa Jojan et.al (2018) viewed that environmental conservation plays a vital role in disaster management and it is high time that the legislators, the bureaucracy and the people of Kerala consider this aspect in order to build and increase resilience in the face of imminent natural disasters. The report of CARE Ratings Ltd(2018) explains the effect of the flood on Kerala is quite sharp and the economic consequences was significant. Infrastructure losses would be high for roads (Rs10-12,000 Crore), airports (Rs30-40 Crore) and housing. Growth in revenue will also be affected when production levels become passive. And also they said that there is a significant reduction in the case of remittances from abroad. Kusala Rajendran (2018) pointed out the importance of sustainable growth for Kerala in this after flood scenario. The policy decisions for rebuilding Kerala taken by the government should be sustainable. As the most literate state with its liberal and educated views, the people of Kerala can lead the way to an environment friendly and sustainable model. All reviews indicates the overall effect of flood on Kerala and suggests its overriding options. But the present study mainly concentrated on the impact of flood on employment sector.

# **Objective**

The main aim of the study is to understand the employment loss on different sectors after flood and the acceptable strategies for recovering the loss of Kerala.

# Methodology

Flood affected Kerala faced so many issues which destroys the entire economy of Kerala. People suffered a lot. The paper will be based on secondary data. The vital secondary data taken from UNDP report 2018 and also from online journals and newspapers. It is descriptive in nature. Employment loss in different sectors and reconstruction strategies will be explained with the help of UNDP report of Kerala.

### EMPLOYMENT LOSS IN DIFFERENT SECTORS

From a state level macroeconomic perspective, the economic impact of a disaster like the Kerala Floods 2018 can be broadly divided into Asset damage- the asset loss refers to the depletion in stock of capital. In the case of asset loss future employment is adversely affected based on the time needed to replace the stock. The asset loss is usually valued on the basis of replacement costs and applied to manufactured capital equipment and land under economic activity.

Income loss- refers to a flow that occurs in a given period. In the case of income loss there is the loss of current employment. INR 17,462 Crore or 2.6% of Kerala's income (GSDP) got washed away due to the floods and the resulting disruption of the economy for 15 days (UNDP Report)

Table-2.occupational sector wise details-Person Days Lost Due to Floods, 2018

Sector	Total	Flood affected	Work	Person days lost
	number	workers	days lost	
	of			
	workers			
Building	1693779	610486(36.04%)	16	97,67,776
construction				
Tailoring services	820606	154387 (18%)	15	23,15,805
Toddy tapping	29908	2273 (7.6%)	35	79,555
Shops	449907	45167(10.03)	8	3,61,336
Agricultural	1616273	403682(24.9%)	33	1,33,21,506
activities				
Handloom	6145	778 (12.6%)	42	32676
weaving				
Abkari	3178	225 (7.07%)	6	1530

Jwellery making	18611	760 (4.08%)	13	9880
Unorganized	417420	5522 (1.32%)	15	82830
sector(not				
specified)				
Small plantation	15091	7607(50.4%)	6	45642
sector				
Bamboo and	79442	27354(34.4%)	18	4,92,372
reeds				
Motor vehicle	869239	14903(1.71%)	12	1,78,836
workers				
Cashew workers	125274	531(0.42%)	19	10,089
in factories				
Head-load	69564	6711(9.64%)	54	3,62,394
workers	U.			
Labor welfare	487871	0	0	0
fund board	1		2	
Beedi and cigar	9000	0	0	0
workers				
Total	6711308	1280416	21.14	2,70,62,227

Source: UNDP Report, 2018

Enquiries revealed that the data were collected largely through the various Welfare Fund Boards that come under the administrative jurisdiction of the Labor Department. As such it does not cover sectors and occupations that come under the jurisdiction of other departments. Thus, the universe of workforce covered is 53% of the total workers as estimated from the NSS data. Table 2 shows that about 2,70,62,227 person days lost due to flood. The working people affected by floods as well as those who face the prospect of job loss due to damage to enterprises, farms, and capital assets need to be taken care of.

### Migrant Labour

As per Gulati Institute of Finance and Taxation (GIFT) study published in 2013, the stock of migrant labour was 25 lakh comprising men. This was equivalent to around 20% of Kerala's workforce. They work six days a week on an average. About 20% of migrant workers were classified as skilled. While they are present in all sectors of the economy, 60% of them were found to be working in the construction sector. Assuming a loss of 13 work days in 16–30 August 2018, the total wage loss works out to INR 2,032.72 crore implying a loss of 296.01 lakh person days for migrant workers.

### **Plantation Sector**

The plantation sector in Kerala is an important one from the point of view of employment and livelihoods. According to the Department of Labour, Government of Kerala, the organized sector employs 69,000 persons in around 725 companies and 1.5 lakh persons work in the unorganized sector consisting of small plantations. A majority of workers in the organised sector are women working on a piece rate wage basis and constitute one of the low-paid sections. According to the Department of Labour, 35,107 workers were affected out of the 50,882 workers in the various flood-affected districts.

# **Agricultural and Allied Laborers**

Given the extent of devastation of land and water resources, agricultural labourers face a bad situation. Agricultural labourers, who constitute around one-fifth of the total workforce, no government agency to look after their needs. Moreover farmers (Agricultural Department), coir workers, workers in cashew and other industries and commercial activities (Department of Industries & Commerce) and service sector departments (various departments) except domestic workers, which is another segment of the working poor.

### **Workers in Traditional Industries**

Several worker households in the traditional industries were affected by the floods directly. Coir processing industry is one of the main traditional industry in Kerala in terms of employment generation. Among the states in India, Kerala is the largest producer of coconuts, contributing 45% of the country's total production. This agrobased rural industry provides subsistence to a large number of families in the coastal belt of Kerala. Around 80% of its workers are women. The cooperative sector plays a key role in the coir industry in the state. The private sector too has a large presence in the industry as final product manufacturers and exporters.

### Khadi & Village Industries

Khadi & Village Industries Board (KVIB) carries out its activities through cooperative societies, registered institutions, and departmental units. It plays an important role in generating regular employment for women in rural areas with minimum investment. These industries use eco-friendly local resources and generate higher employment opportunities. The workers engaged in handicrafts of various types, most of them from socially and economically backward classes. They lost their livelihood after flood.

### Handloom

This industry is dominated by the co-operative sector. There were 600 registered Primary Handloom Weavers Cooperative Societies in the state during the year 2015–16.Of these 600 societies 402 were in working condition as on October 2016. The number of factory type cooperative societies functioning at present is 84 (14%) and cottage-type societies is 318 (53%). These weavers also own their family looms and work from home as well. It is estimated that the cost of restoration of each such smaller loom will be around INR 2 lakh. In addition, while the restoration continues, the weavers are going to lose their livelihood at an average rate of INR 1,200 per day (with two or more working members per household), for at least six months.

### **Tourism**

The latest figures (2016–17) show that 10.38 lakh foreign tourists and 13.17 lakh domestic tourists visited Kerala in 2016–17. The earnings were INR 7,749.51 crore and INR 15,348.64 crore respectively. Indirect income ion from tourism has been estimated at INR 6,560.41 crore. That works out to 4.8% of the Kerala's GSDP. The August 2018 floods disrupted this flow temporarily for the first 15 days. Since the monsoon period has a lower rate of tourist arrival than other seasons, it may not be too far off the mark to assume a 20%-25% decline in revenue (between INR 5,932 crore and INR 7,415 crore). This has consequences for a segment of the workers who are casually employed in hotels and restaurants and in transport sector as well as the self-employed and other workers in small shops and restaurants. The floods resulted in the cancellation of Onam festivities in all districts, causing tremendous losses in the tourism sector. These trends could be seen across the sector and were worse for those who lost their workplaces and houses in the most affected districts of Ernakulum, Pathanamthitta, and Trissur. Tourism is one of the modern sectors of the Kerala economy that has benefitted from the ecological endowments of the state. The damage to the natural environment is equivalent to the damage or destruction of the natural capital foundation of this sector that contributes to the income and employment in Kerala's economy.

### Micro and Small Industries

Barring a few large industrial units, mostly in the public sector, Kerala's manufacturing sector is dominated by both modern and traditional industries. The latter has been on a declining path, although some of them such as coir have been staging a comeback, given the environment-friendly low carbon footprint products such as geotextiles. New industries that have made their presence felt are food products, rubber products, plywood manufacturing, rice milling, general engineering, pharmaceuticals, printing, Ayurveda and so on. A number of clusters in Aluva in Ernakulam district were severely affected by the floods. So is the case of coir industrial units (including coir cooperatives). The Department of Industries and Commerce made a quick assessment of the damages and supplied a summary statement of the number of enterprises, number of workers affected and an estimate of loss to plant and equipment. According to this assessment, 3,590 MSMEs (of 1.28 lakh) and 17,413 workers (of 6.6 lakh) were affected by the disaster.

# RECOVERY METHODS AND STRATEGIES

The idea of 'Build Back Better' (BBB) for a New Kerala refers environmental sustainability, cost effective technologies, green job creation, skill development, climate resilient livelihoods via decentralized planning and social-cum gender inclusion. From an employment and livelihoods point of view, two recovery scenario have been worked out. The first one, based on meeting the immediate needs in the affected sectors. The total recovery cost is INR 3,895.66 crore for five years. An additional recovery scenario with a view to addressing livelihood concerns linked to eco-restoration (recovering and strengthening the natural capital foundation). This is an additional employment programme leveraging the Mahatma Gandhi National Rural Employment Guarantee Scheme and expanding the state government's urban employment scheme called Ayyankali Employment Guarantee. This works out to INR 23,065.20 Crore. Out of this, INR 16,915.63 is to be mobilized by leveraging MGNREGS, i.e., 73% of the total cost. Of the remaining INR 6,149.57 crore, INR 1,098.21 Crore is kept for skill

development. If half of this amount can be leveraged through centrally-sponsored schemes, the state government's burden will reduce to INR 5,600.47 crore or 24% of the total cost for five years.

# One year plan-short term:

Creating emergency employment through cash for work and other quick employment projects: This should address the needs of the 2.05 lakh MGNREGS job card holders out of the 6.4 lakh families who were given a cash relief of INR 10,000. Even as it provides livelihood support it can be linked to the repair of damaged bunds, for debris clearance of land, repair of ponds and lakes used for irrigation and water control measures, strengthening riverine embankments and all such activities that have to do with land and water resource management and development. These can be taken up through the MGNREGS for rural areas and Ayyankali Employment Guarantee Scheme in urban areas.

# Special attention for Kudumbashree members:

Leased land cultivators and those who set up microenterprises are a very vulnerable group in the post-floods scenario. This group needs special attention in the context of rehabilitation, but more importantly with regard to issues of land ownership, leased land regulations, decent wages and insurance in order to be resilient to future disasters. An appropriate policy framework for leased land cultivation such as by JLGs and similar groups is warranted. While there is an extensive data base of households and individual members, especially those belonging to economically poorer households (e.g. Kudumbashree, panchayats, and the public distribution system), field visits and review reports pointed out problems in accessing benefits to some of the flood-affected poor. This needs to be specially taken care of by creating access points such as the panchayats for their inclusion.

### Insurance packages for climate resilient agriculture:

The current insurance packages cover paddy, cashew, plantain, sugarcane, tapioca, and mango. Other agricultural products like rubber are also to be brought in. Current insurance packages are weather-based and crop-based. Insurance packages should also cover damages from wind and excess rains.

### Capital recovery/subsidy and loans for income loss:

These have been provided for sectors with a large number of informal workers such as artisanal households and other such sectors.

### One to three years plan- Medium term:

### Restoration and regeneration of natural capital:

This is mostly green-job-creating activity. Technological choices need to be made that entail lower carbon footprint, e.g., in strengthening and construction of embankments and related works

### Promotion of alternative technologies in building construction

This is an area in which there are a number of demonstrated alternatives practiced in Kerala. There is already a skilled workforce and more workers can be skilled given the low learning curve of the already educated young labour force. Promotion of low carbon footprint materials is another such area. Some of these have been spelt out in detail in other chapters (e.g. Housing) but the employment generation potential should be kept in mind.

# **Promotion of climate resilient Agriculture:**

Crop-based seasonality mapping needs to be carried out to identify vulnerabilities to hazards and a menu of options for farmers in vulnerable areas needs to be developed. Integrated farming approach is already being promoted by the Haritha Kerala Mission. This needs to be intensified.

# **Product innovation and market development:**

It is very important, especially for the artisanal sectors like coir and handloom, to intensify efforts in developing new products and expanding access to market through innovative methods. These concerns, however, have largely been addressed already.

# **Entrepreneurship promotion:**

The Government of Kerala needs to cement the brand on Nava Kerala products through E-commerce platforms in allied areas such as organic agriculture and its products, handicrafts and trade, efforts in waste management, local ecological tourism, arts heritage and culture.

# Skills upgrade and technology links for creating green jobs:

Skill upgrade and development is a crucial area of concern to which Kerala needs to pay particular attention. It should be dovetailed into the emerging concept of creating green jobs.

# Three to five years plan -Long-term Plan:

Disaster, climate risk and livelihoods governance: Kerala's distinct people's participation model on local self-government forms the bedrock of the recovery strategy. The initiatives of local governments are essential for community-based disaster risk reduction plans, community-based disaster management, climate risk and livelihoods recovery plans. Capacity building and strengthening of such a model confirms the social, economic, and political decisions that decides exposure and vulnerability to natural disasters and also provides integrated solutions for disaster risk reduction, climate adaptation and sustainable livelihoods.

### **Enterprise, product innovation, market development and skill development:**

These have to be carried on in the long term as well in order to strengthen the emergence of a New Kerala with environmental sustainability as a key characteristic.

# Conclusion

The Kerala State Planning Board is the agency for coordinating the plan-related employment dimension in the state. It needs to be strengthened to function as a more coordinated platform to spell out the employment implications of demographic transition, educated unemployment, emigration of Kerala labour and migration of non-Kerala labour, labour legislation, and social security in the changed context of building a new Kerala. The additional challenge is to think afresh for the creation of green jobs in the economy. It is impossible to express loss in exact quantity and words as it is unable to regain human and animal life's after the disaster.

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