
*Case Study Paper*Role of Women Self Help Groups in Disaster Resilience and Livelihood
Regeneration: Post Flood Experience from Kerala

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Abstract

The Indian state of Kerala witnessed one of the worst floods in nearly a century in August 2018. More than 400 lives were lost and more than a million persons had to move to relief camps. The government and the civic society together overcame the disaster with great effort. The disaster management plans in place required a revisit and a rethink. A study of the revival efforts of one of the worst affected villages was conducted in September 2018. The study pointed out the need for a detailed spatial plan for disaster resilience, and recovery. Also it showed the power of women self help groups in mitigating the effects on flood and reconstructing their livelihood. The case of a severely affected village is examined. The methods used include, sectoral studies, observation and interviews. The village's experience in facing and mitigating the floods gives rise to the need for a spatial planning strategy to address the disaster during its occurrence and the recovery to be followed. Critical infrastructure were affected during the floods, parts of the major connecting roads (State highways) were submerged in water, closing evacuation routes. Many Agricultural and fishing farms were submerged in addition to a lot of houses. Many small scale traders lost everything they had. After the flood waters receded many roads including major state highways could be used with minor repair. Women self help groups called "Kudumbasree" units came forward to restart cooperative farming in the paddy, plantain and fish farms with the help of agriculture department of the state government. The floods proved to be devastating. However normal life could restart with great effort. If the village had a proper plan in place to discourage building activity in flood plains and a recovery plan in place the extent of damages could be reduced. Living under the threat of more floods and droughts expected in near future, this study proposes a resilience action plan using the social capital of women self help groups.

Keywords

Flood Resilience, Livelihood Regeneration, Women Self Help Groups, Gender Mainstreaming

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1. Flood Resilience

Many studies have predicted more floods and droughts in many regions of the world in the context of climate change. The frequency of occurrence of floods and related climate hazards is likely to increase in near future. Large scale land use conversion and increase in anthropogenic activities lead to greater risks during disasters. Kerala experienced the worst

flood in last 94 years, in August 2018, often compared to the devastating floods of 1924. The flood has left many lessons of to be learnt for planners and disaster management experts. Even with all disaster management and risk zonation plans in place Kerala had to suffer the effect of flood leaving deep marks in the physical and social fabric. The highly literate community of Kerala rose to the occasion and took the lead role in rescue, relief and rebuild activities.

Kerala the southernmost state of India is often classified as an Extended Metropolitan Region- An area of 38863 square kilometres with 44 rivers and 590 km of coastline showing widespread urban characteristics. According to Disaster management plan of Kerala, 14.52% of the state is vulnerable to floods. Flooding during Monsoon and drought during summer is being witnessed more frequently in recent years. Many attribute this to widespread land use conversion including reclaiming of paddy and wetlands for dry crops and building activities. Flood resilience is the ability of a community to face a hazard and come back to normal life with minimum damage. A proper management plan can aid the community to get to safe place, cause minimum damage to assets and to recover to normal life in a short span of time.

2. Community participation in risk reduction

Local community can play a vital role in disaster risk reduction and mitigation. Community is the first responder at the time of a disaster. Community level capacity building can reduce the vulnerabilities and increase resilience. Community can play a great role in rescue, rehabilitation and mitigation phase. However it requires coordinated efforts and proper leadership to put a preparedness plan in place.

While flood waters started rising in Kerala, the community was the first to respond. Fisherfolk who are skilled in dealing with deep waters came forward with their boats and started rescuing the stranded people. In addition to the relief camps opened by the state administration, private persons, families, NGOs, and religious organizations also came forward to start relief camps. The youth, especially students came forward to volunteer work in the relief camps. Relief materials were collected from all over the state and truck loads of relief materials were transported to relief camps.

Community volunteering should be utilised with a proper plan so as to ensure that relief material and personnel reach all shelters. In many cases inaccessibility caused delay in receiving relief materials.

A major hurdle faced by relief workers was the reluctance of affected people to shift to relief camps. A lot of persuasion was required for convincing the people to move to relief camps.

2.1. Flooding in Karumalloor

Karumalloor is a village under the jurisdiction of a "Village Panchayath" (the smallest self governance unit in a three tier system). The elected Governing Body of the Village Panchayath is responsible for ensuring people participation in all aspects of Planning. 50% of the elected representatives are women. The village has an area of 21.05 Sq. Km. and a population of 36,078 as per Census 2011. The northern boundary of the village is the river

Periyar, the longest river in Kerala which flows from the Western Ghats on the East towards the Arabian Sea on the west. Majority of the population is depended on agriculture. Paddy is a major crop cultivated here. Vegetables, plantain and some dry crops are also cultivated.



Figure: Immediate context of Karumalloor Village

Paddy was a major crop cultivated all over Kerala. In the past three decades this has drastically reduced due to the increasing cost of Labour. Largescale paddy field reclamation has resulted in ground water depletion and more surface runoff. In Karumalloor many women self help groups have started paddy cultivation on leased fields. This new initiative has increased paddy production and curtailed wetland reclamation. Kerala Paddy and Wetland conservation act (2008) prohibits reclamation of paddy fields.

In August 2018, excessive rain and poor reservoir management resulted in the river overflowing into the paddy fields and most of the low lying area. Water has risen upto 10-11 m from the riverbed. Many houses and roads also were submerged. Even critical infrastructure, like roads and bridges, community health centre and Village Panchayath office were also flooded.

Housing

The village has 13,928 houses as per the development report of the Panchayat (2017). Since the village is near the town Aluva, the development pressure has resulted in many apartments buildings being built near the river bank. Some of these apartments were submerged upto two storeyes during the floods.

There are 19 low income housing areas (housing colonies) in the village. These housing units are mostly government funded within 150-200 Sq. m. Plots. Many of the housing colonies are located in low lying land as land value is low in these areas. 80% of these houses were affected by floods and had to be relocated to relief camps. There were 7 relief camps which were opened in five schools, one college and one church.

50% of the population depended on tapped water from treated source for drinking water and another of 29% on uncovered well. Both the local water supply sources and wells were largely affected and contaminated by flood waters. Solid waste management also was a major issue after the flood waters receded. Most of the households had cattle and poultry,

only a part of which could be rescued during floods. Post floods', removing the carcasses of cattle was a major task. The Panchayath with the help of local community carried out it properly. Timely removal and disposal could prevent major outbreak of diseases. However burning was considered as an effective method which resulted in atmospheric pollution.

3. Women self help groups in Kerala

"Kudumbashree" is a major network of women self help groups all over the state. Started in 1997, it is considered as a major poverty alleviation scheme in the state. The self help groups are active in many areas of self employment starting from small scale production, marketing, waste management, provision of domestic services and farming. State government initiatives have helped to provide low interest loans to the groups as capital. It has resulted in increasing female workforce participation among rural and urban poor and better living condition.

Karumalloor village also had a strong network of Kudumbashree groups. They were active in paddy cultivation, poultry and cattle rearing, fish farming, small scale high tech farming etc. Floods damaged many of their assets and affected their operation.

4. Kudumbashree and Livelihood restoration

4.1. Subheading 3.1

With the active participation of community and state agriculture department, Kudumbashree has spearheaded the fast recovery of this sector. Within a month of the flood when the study was being conducted, framers had already started the next crop season. Kudumbashree groups were seen preparing farm land, transporting farming materials in small pickup vans and setting up poultry farms. Without waiting for any government agency or external aid they started their rehabilitation work.

However lack of proper insurance has increased the economic loss in both agriculture and animal husbandry. Creating more local markets can help in the development of dry cultivation.

After the flood the change in soil condition has affected the cultivation. There has also been a reduction in the water table level. The existing ponds are filled with mud and clay which has reduced the availability of water. Uncertainty of how the crop will react to the new soil condition has generated concern within the farmers.

There has also been a reduction in the milk production by the cows, This has affected the milk distribution by the societies. Also there are No compensation fixed for shed ,Feed loss and machinery damage.

Most of these Kudumbashree women come from economically weaker sections. They require small scale assistance and training to continue their livelihoods. Village level local authorities can train them in reducing the vulnerability and increasing their capacity for resilience. Local leaders from Kudumbashree could be encouraged to lead disaster

management, rescue and restoration teams. Local level planning can reduce livelihood vulnerability and help in long term Nation Building.

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