

Role of entrepreneurship in empowering Kerala community for disaster resilience

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Abstract: Flood is one of the most frequent and recurring disasters in the world. Kerala has been facing frequent climate related disasters, epidemics and pandemic attacks. And a rapid increase in unemployment rate in the past few years. These pandemics and calamities result in long term unemployment, health issues, destitution and other impacts that weaken the capacities to recoup from calamities. Numerous researches show that entrepreneurship helps in disaster resilience by inducing strength to communities moving towards restructuring and recuperating by decreasing destitution, vulnerability and risk. It was also proved in earlier researches that the household income of Kerala was reduced by 16% after the 2019 flood compared to the neighbouring states (15). This research paper intends to examine the contribution of disaster entrepreneurship in community-level resilience in Kerala. The authors consider disaster entrepreneurship as a technique to retain stability in the society during and after the occurrence of any disaster or pandemic like corona, by identifying business opportunities in supplying commodities required by the community stakeholders. This study was done by referring the secondary data and by reaching out to flood affected people of Kalamasheri, Aluva and MG Road. The paper winds up with recommendations for researchers to verify the need of long-term observation and investigation of post calamity livelihood programming and to examine the strength of communities after the closure of government and NGO Support.

Keywords: Entrepreneurial Business Continuity, Disaster Vulnerability, Disaster Resilience, Disaster Recovery, Disaster Response.

1. Introduction

Kerala's economic progress and achievements has been severely hampered by the disasters that hit the state in 2018, 2019 and the pandemic in 2020. Evidences show that "God's own country's swift recovery and resilience from the last disaster prone phase was largely the impact of high end startups and businesses that clutched out in Kerala. The community is blessed with innumerable budding entrepreneurs who through the relief activities and quick response to the disaster inflicted society, gathered momentum to sustain in the post disaster period. Cambodia has a similar terrain like Kerala where they explore the benefits of social entrepreneurship as effective means of disaster risk reduction. The disaster resilience could be enhanced by promoting young entrepreneurs to serve as a catalyst to promote and mobilise them in the development of plans for resilience.

When Kerala, coped with the post-disaster phase efficiently and made things control within days. On the approaches of development in India the "Kerala Model of Development" was a major discussion. (17) Not many understood that one of the reason for the shown resilient coping methods where the results of managing with business vulnerabilities. As its result they were able to flourish in spite of the prohibitive constraints stimulated after the disaster. During 2018 floods and nearly 341 landslides, landslides were triggered by torrential rainfall. It affected 5.4 million people and displaced 1.4 million people (17). A study conducted for

Ernst and Young for Kerala State Industrial Corporation observed huge source of investment from domestic sector as well as NRIs on interest free basis. This paper is centering on accessing the extend of business vulnerabilities and to evaluate the participation of public and private entities in reducing vulnerabilities. Once a society has initiated itself into enterprise, it acquires a strong quality. Due the political changes these coffee shops were closed down. But soon after Tsunami to cater the international agencies and NGOs who had come to support disaster reconstruction, hundreds of shops cropped up. So if you closely check the earlier cases, you can see the increased disaster risk bearing capacity of people who are into business and has faced the ups and downs. And also these experiences change their mentality to help the ones who are in need. Than the aids given by government and non-governmental organisations post the disaster, to apply the approaches like "Building Back Better" in our society their mentality should also change(1), (2).

This research gives a clarification to the need of long-term observation and investigation of post calamity livelihood programming. The research is specific in investigating vulnerability lessening and examining the strength of the communities after the closure of government and NGO support.

2. Literature Review

The paper throws insights on private division organizations' response to natural calamities, the impact of entrepreneurs in overcoming these and the suggestion for building community versatility. These reactions in specific can be eluded as Disaster entrepreneurship. Disaster Entrepreneurship is the explanation of how suffering results in driving entrepreneurship and how it drives entrepreneurs to pop out after a disaster. And these entrepreneurs are found to be more altruistic, even if they lacked some knowledge and experience (16). The reaction of stakeholders and the private entrepreneur's, to create or maintain esteem during and soon after the occurrence of disaster by providing products and assistance required by the people. It is high time that we explore firms seeking after market opportunities rather than simply charitable or civic reactions. Disaster enterprise can take the shape of either a planned or versatile response to a one of a kind and damaging circumstance (3) (4). It ordinarily includes established and non-established firms involving in novel reaction and recuperation exercises. When the concept of resilience was build, the study generally centered on why few communities find it easy in recouping from these disasters than others. Even in this current scenario when the world stunned at the fast rate at which COVID-19 is affecting the lives of people and the economies worldwide. Even the developed countries have had a dramatic fall in economy due to this uncontrollable outbreak. While Kerala recovered in a short span other states had a tough time regaining the momentum.

Community resilience must be connected more particularly to activities and procedures utilized by companies and individuals in a disaster. There's no literature back up for how firm reactions are connected to community flexibility to any sort of fiascos, in spite of inflated profile illustrations of businesses taking important measures in their repercussions the later floods in Kerala. For occasion, HLL Life care Limited workers played an imperative in giving nourishment, water and essential supplies to those in Kerala marooned by surge. Electrical utility things were advertised to be repaired free of taken a toll by numerous companies like Kirloskar, Huawei, Vistara etc.

This paper aims to explore on post disaster community recuperation and resilience through empowering the entrepreneurs and by utilizing the entrepreneurial capability. The entrepreneurial activities allow a thrust to create the antagonistically affected territories post any disaster (5). If you conceptualize how catastrophe entrepreneurship contributes to community versatility you examine it by tending to aids that developed in the repercussions of serious floods and landslides in 2019. The resource voids occurred within the frame of reduced local assets and deficiencies in disaster response frameworks in 2018 were amended 2019. Even while dealing COVID-19 the state has gained appreciation from around the world for its timely restrictions and

monitoring which has helped largely in controlling the pandemic attack to a certain level. And COVID positive cases have been treated efficiently in this timeframe.

Versatility is the capacity of a person, organization to come back from misfortune. Kerala is a community profoundly known and acknowledged for its timely responsiveness in the time of catastrophes that happened both in 2018 and 2019. (6) Kerala known as the top dealers within the pre-British period, and as they have struggled for freedom and won it. The courage they have is gigantic to battle any misfortunes. Though resilience is a notion that's connected at different areas of analysis, it shows up the chances of recurrence over diversified domains. In Organisational Behaviour, strength research has been centered on researching about hypothetical clarifications for why some classes of people are able to handle difficulty better than the others.

This research is based on the significance of work in community resilience (7) (8). Communities include the Kerala terrains including the natural, socio-economic situations after being influenced by floods, pandemics and avalanches. Without degradation, repetition and access to excess capacity, rapidly reacting in a very convenient fashion by identifying problems and mobilizing resources utilizing the properties of robust withstanding of stress, Community resilience can be studied. Detailing of successful strategies can mitigate dangers by increasing the capacity of social actors along with framework upgrades. These recovery activities help in minimizing disturbances and future disaster impacts. The seriousness of disaster impacts generally depends on the effectiveness of community resilience. From simple disturbances to extreme complications like availability and providing the fundamental needs including access to water, food, and shelter in case of natural disasters as well as unforeseen hit by any pandemic.

We often befuddle resistance with resilience. (9) When resistance is withstanding the impact of misfortune; Resistance is when a framework is adequately strong as to dispose of the destructive impacts from the faced adversity. Resistance can diminish the effect of adversity and help in a framework dodge full blown collapse, for resistance alone isn't resilience. Resilience amplifies past resistance to add preparation a community is prepared for and recoups from the destructive impacts of disaster. In brief, community resilience includes how the society prepares for, respond to and recoup from calamity impacts. Resilience capacity of a community depends on the difficulty it has confronted. A more resilient community must have felt the difficulty at the crest, but still overseen to surpass its negativities. And resilience not only depends on confronting the disaster but moreover depends on how the community was able to recover from the entire situation.

After going through Redman and Mory (1923) who stated that "research is a systematized effort to gain new knowledge" (12), we characterize research here as a proficient way of finding solutions to questions. Disaster resilience within the built surroundings is an intrigue investigation field which includes together a wide extend of researchers from distinctive backgrounds and hence with distinctive research traditions. Amaratunga et al. (2002) states, in intrigue research, the clear understanding of the investigation issue, phrasing and choice of fitting research strategies remains particularly intense, as "...crucial issues relating to diverse types of research typologies will influence the total research process, as the victory of a research venture will be generally dependent on the strength of this strategy". Over different disciplines, a wide combination of elective research methods, terms and approaches are utilized and are recognized to changing degrees, so that finding a reasonable way to conduct research inside the exceptional choice of techniques can be challenging and requests "disagreement around hypothetical concepts and flawed presumptions about the human portion in calamities to talk about approximately the joining of distinctive disciplines and the relative legitimization of competing standards. In this way, examination methodology choice is a case of both basic issue and a challenging choice to create within the setting of Disaster Resilience research (10) (11).

Among the various publications reviewing research methodology in disaster resilience has been one edited collection of Robert Stallings sating there is very little research writing in the field of disaster and disaster

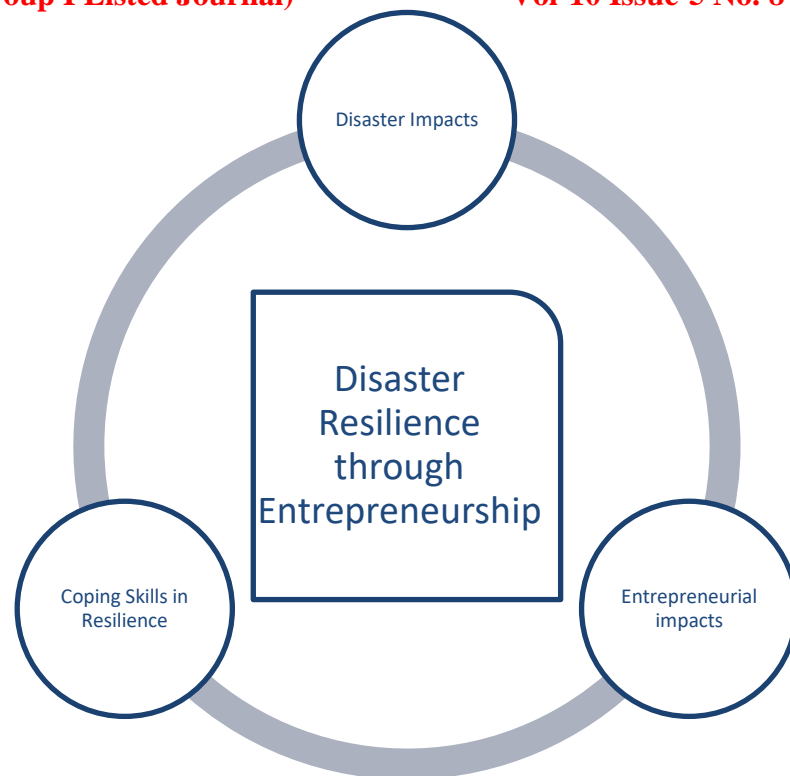
resilience. Since each disaster holds a unique feature even in the availability of research also doesn't create much effect on the study. There has not been any comprehensive research in this field.

4. Research Methodology

To answer the questions raised the study began with an analysis of the Great East Japan and the post business birth rates after the devastating earthquake disaster in March 11, 2011 followed by the massive tsunami. And the blooming rates of business became higher than most of Japan's major cities. In a study conducted by Tohmatsu Venture Support Co., Ltd., Sendai City from January 20, 2013 to March 21, 2014 to analyse the motivations of entrepreneurs to commenced the business before and after the calamity. The options were given to the 283 selected respondents were '(I) want to do something for others' want to solve social problems'; and 'There are business chances in the areas'. On the basis of these queries, entrepreneurs who commenced the business after the calamity tended to start their own businesses based on altruism than the ones who started it before the calamity. Most people who started the business felt the need to create jobs for people in the damaged areas as much as possible and the desire to resolve the problems faced by the infected area. (16).

Since we want to analyse the how much entrepreneurship can help in disaster resilience, we are taking into consideration three frameworks for theoretical analysis; i.e Resilience Framework, Disaster Framework and Social Entrepreneurship Framework. Although these three frameworks have no direct link, connecting these can provide us with disaster resilience framework using entrepreneurship. The social entrepreneurship framework becomes increasingly focused on organizational interests as a means to achieve social impact rather than on social impact itself. The framework focuses on utilising people, capital and opportunity for political socio-cultural regulatory demographics (18). The Sendai Framework for Disaster Risk Reduction capacities offer assistance to nations to create disaster risk reduction methodologies as a management instrument to form well-suited risk-informed policy choices and distribute resources to prevent unused disaster risks (19). The Resilience Framework created by Angie Hart and Derek Bincow outlines a set of thoughts and practices that promote resilience. It is based on a body of research advancement called Resilient Therapy.

Disaster Resilience through Entrepreneurship is comprehensive concept derived from existing disaster resilience frameworks and Entrepreneurial Frameworks. Through this conceptual framework it will be easy to explain the link between entrepreneurship and Disaster Resilience. Disaster is an uncontrollable natural calamity, but being a resilient society is our choice. For that entrepreneurship or entrepreneurs has shown a great crave to recover and adapt after the first flood in 2018. And in 2019, they were much prepared to face the disaster and recovery was swifter this time. Than the stakeholders, the entrepreneurs or the ones with entrepreneurial attitude were more resilient and risk taking. In the wake of disaster entrepreneurship booms which can meet the unpredictable and unexpected demands. These organisations can satisfy needs that cannot be fulfilled by the existing ones. The disasters provide the entrepreneurs with a stage to venture new business with the needed innovations under the certain conditions. These organisations help in easy regain of economic stability.



Source: *Disaster Resilience through Entrepreneurship Framework is a comprehensive concept derived from existing disaster resilience frameworks and Entrepreneurial Frameworks.*

5. Firm reaction towards disasters and epidemics

In 2018 worst flooding caused loss of lives, infrastructures and farmland of Kerala. More than 32 million individuals were influenced and the food water left the homes with messy muddle. The individuals had to be emptied and sheltered in temporary camps. Areas like Idukki and Munnar were worst affected as the heavy storm rain activated avalanches and caused extreme damage. It resulted in issues to deliver essential commodities over the locale. Numerous studies conducted outside India produce vital experiences into how firms can manage disaster threats lower their defenselessness and increment their changes of viable survival, they contribute small to understanding how firms engage in community-wide fiasco reaction and recovery endeavors, and for example, by mobilizing assets, centering on meeting ignored disaster needs and performing disaster-oriented activities.

While Kerala was recouping from two disastrous floods, exactly after one year it was hit by two floods in consecutive years. Last two year's floods were one of the most dangerous calamities of the century. Along with heavy rain, the study of the floods impact shows that the huge number of deaths during the floods can be associated to the rampant depletion of the Western Ghats, the biodiversity hotspot that covers about half of Kerala. (3) Experts caution that if the annihilation goes on unexamined, future floods could bring even greater disasters in India's monsoon gateway. And now the state is hit by COVID-19 which is efficiently managed by the government. As a result of which casualties have been under controllable limit.

6. Conclusion: Disaster entrepreneurial reactions

The investigations conducted in our study reflect a larger scale survey on entrepreneurs after a disaster. The unique conditions posed by disasters can address entrepreneurial activities and these calamities can lead to creation. There is a difficulty to conclude due to cultural differences and the secondary information used for the creation of the findings. And the research is a compilation of only a particular time period. It is evident the

literature reviews that the altruistic attitude may prevail after the calamity (16). The entrepreneurs who seize the opportunity not only enhance their dreams but also uplift a society to survive the post disaster impact at an easy pace.

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