SURVIVING DISASTERS; MAKING RESILIENT COMMUNITIES THROUGH COMMUNITY RADIOS

By

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To

MY PARENTS & TEACHERS

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I am highly grateful to Allah Almighty, the most beneficent, the most merciful, for giving me strength, courage and resources to complete this research.

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(Ashfaq Naseem)

ABSTRACT

Community Radio is a very powerful tool being used by the communities for transforming at a much faster pace. This hidden potential has never been realized by Pakistani societies which still live in a state of chaos in the 21st century. Community radios' anticipated role of preparing communities for disasters is unbelievable and same can be explored for the Pakistani communities. There is a need for realization at Government level for making communities resilient through community radios. National Disaster Management Authority can help in establishing a radio community channel as a Pilot Project in Pakistan under its own authority. Local communities can be encouraged for active participation in transforming their own communities in the realm of Disaster Risk Management. Once the community radio channel has been reputed then it can leap forward by eliminating all the hazards through community education/ mitigation. Local communities can be sensitized about Pakistan's global DRM commitments like efforts in reduction in poverty and hunger, making resilient communities by empowering women, gender equality and ensuring environmental sustainability. Goals can be set for monitoring at regular intervals for further expansion of community based FM radio networks in complete Pakistan. Communities can be integrated and made resilient in terms of disaster management under the overall umbrella of National Disaster Management Authority.

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LIST OF ABBREVIATIONS

ADRC	Asian Disaster Reduction Center
AM	Amplitude Modulation
DCO	District Coordination Officer
DDMA	District Disaster Management Authority
DM	Disaster Management
DO	District Officer
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
FM	Frequency Modulation
HFA	Hyogo Framework for Action
NDMA	National Disaster Management Authority
NDM-Act	National Disaster Management – Act
NDMO	National Disaster Management Ordinance
NDRMF	National Disaster Risk Management Framework
NDRRP	National Disaster Risk Reduction Policy
PDMA	Provincial Disaster Management Authority
PMD	Pakistan Meteorological Department
PST	Pakistan Standard Time

RDA	Rawalpindi Development Authority
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction
STSMCZ	Subtropical Triple Season Moderate Climate Zone
SUPARCO	Space and Upper Atmosphere Research Commission
UN	United Nations
UNDP	United Nations Development Program
UNFCCC	United Framework Convention on Climate Change
UNISDR	United Nations International Strategy for Disaster Reduction
VARG	Vulnerability and Adaptation Resource Group
WAPDA	Water and Power Development Authority
WASA	Water and Sanitation Authority
WCDR	World Conference on Disaster Reduction
WHO	World Health Organization

Chapter 1

INTRODUCTION

1.1 General

History of disasters is as old as the history of mankind itself however; disasters expose areas of extreme weaknesses in jurisdiction of catastrophe watchfulness and alleviation in order to incapacitate the communities. It's very important that we prepare for calamities, but what's more important is that we prepare for them well in time. Let it be earthquakes, floods, hurricanes, wildfires, nuclear explosions or riots etc, disaster are increasing exponentially every day. To cope with these disasters an aptitude towards disaster management is required, which is needed to be developed at highest level but implemented at local level (Murphy, 2014).

Disasters are increasing day by day and according to the latest research, number of disasters is increasing every year and the increase is more where human development is very low. Maximum increase recorded in such countries was up to 145% and the main reason which was concluded was lack of harmony and coordination between the organizations' (Khan & Khan, 2008). The concept of disaster management is relatively new but the task of disaster manager finds its roots as old as mankind itself. The main aim of disaster management is that the root causes of disasters should be eliminated permanently.

It's very important that we have community based disaster preparedness, as it will have long lasting effects. People tend to solve big issues by taking small steps as their capacity, similarly everyone chips in their best and eventually they are able to face any calamity as a community and it may also have its drawbacks, which is that people may have to shoulder responsibilities more then what they deem for but on the whole they face the problem collectively and efficiently (Allen, 2006). The observable fact of frequent disaster have increased the value of this effort of solving and standing up against the disaster as a community, but to be thoroughly effective the authorities need to support profoundly (Khushik, Akram, Mahesar & Mahesar, 2015).

Broadcasting is distributed in three main categories, which are: -

a. Public service broadcasting

b. Commercial/ private broadcasting

c. Community broadcasting

‘‘The Year of Community Radio’’ was 2008. It was proclaimed by World Association of Community Radio Broadcasters. Community broadcasting is a non-profit organization, generally owned by a particular segment of a community or some association working for the welfare of the community (Fraser & Estrada, 2001). Community radio is generally used to discuss the social requirement of a community or endeavor the purpose of a particular organization, but unfortunately this is not what exactly happens in practice. People start using it for its personal gain and profitability, which throws away the aim and objectivity of community broadcast.

With the development of technology, community broadcast has a very increased horizon, as people now try to use it to bring a social change using it. It not only serves as a tool by rich to influence community, but it also acts as a voice of poor (Hannides, 2011). These community broadcast are not only popular in underdeveloped area, rather in last couple of decades it has also strengthen its roots in modern world, distributing a wide range of ideologies spoken freely through it (Barlow, 1998)

The most important aspect of community broadcast is participation of the community (Sullivan, 2007). The more a community tends to participate, the more vocal would be a community broadcast in case of any calamity or unforeseen. Media researchers have established a fact that community broadcast can play a vital role in bringing any kind of social change, whether it is uplifting the moral values, preparing for disasters, and public awareness for some particular issue or post disaster rehabilitation (Naqvi, Baloch, Niaz, &Kasi, 2011).

Community broadcast is the most important tool in regards to disaster management. Since most of the equipment is already in place and in case of any disaster, radio is most likely to remain in working condition, or it would be the last medium of communication which will go out. Radio has been in existence in Pakistan since colonial times when the country was under

British rule as Indo-Pak Subcontinent. After gaining independence in 1947, the Pakistan government took over the running of the radio station. Radio was mostly used as a government mouthpiece with no opposing views allowed to be broadcast. Generally, the post-independence radio was used as a tool of communicating government information and activities to the people. Albeit, after the earthquake of 2005 there is a noteworthy outlook change the extent that group readiness is concerned (Hasan and Khurshid, 1994, p. 225) has delineated Pakistani scene saying that, "The main part of populace of the nation lives in country ranges where offices in the field of instruction are extremely meager and constrained. Not at all like the printed words and other media of correspondence, radio appreciates the exceptional preferences of achieving the far flung ranges and message can be effortlessly comprehended by everybody as it requires no earlier standard of education and knowledge. Special efforts are being made to enable communities to participate in developing community broadcast for better solutions in the times of disaster.

1.2 Background to the Study

Pakistan is categorized at 100 among 173 nations in the Risk Index of the world, computed by UNU-EHS (United Nations University for Environment and Human Security) and same was likewise included in the 2016 World Risk Report (WRR 2016). The report empirically and scientifically mirrors a nation's defenselessness, and its introduction to normal dangers to decide a positioning of nations around the globe in view of their catastrophe chance. Although numeral organizations are working at national level for catastrophe danger diminution however coordination is very scarce between the government institutions and the civil societies. In order to enable the communities for being disaster resilient there is a need to enhance the capacities of communities by educating them at grass root level. Community radios are considered the best tool available to all organizations whether governmental or non- governmental for transforming the communities. The understanding of data and aptitudes has increased fame in the task to facilitate faction with Community Radio as a one of a kind and compelling piece of equipment. The expansion of regional radio stations tip-off to both the improvement in data modernization and the stirring of development worldview towards a more participatory way of data and learning exchange (Chapman et al. 2003). Kumar (2004) distinguished radio as a road for participatory correspondence and as a device applicable in both monetary and social advancement. A lot of research has been done on community radios in Pakistan (see. Dr.Jumani, 2009; Seemi, 2010;

Khan.I, 2014) however, little focus has been made on the part of community radio in endowing local communities in Pakistan in the realm of Disaster Management.

1.3 Statement of Research Problem

Radio is perceived as an ease medium, particularly suited to achieve remote groups and is particularly viable in contacting individuals influenced by calamities when different methods for correspondence are disturbed. Late regular and human made debacle is a noteworthy reason for worry globally. “In emergency and crisis, broadcasting can be a salvation,” said Ban Ki-moon. “In the midst of the vestiges and despite a crisis, the means of communication is the primary means for survival,” says Director-General of UNESCO. “It’s sturdiness is an exceptional preferred standpoint, frequently empowering it to oppose shocks and send the message back of security and anticipation to whatever number individuals as could reasonably be expected, preferable and speedier over other media, sparing lives.”

Keeping in view the above mentioned advantages of community radios there is a need to gauge impact of community broadcast in Pakistan in the realm of Disasters by enabling the communities as better informed and prepared for any incoming Disaster.

1.4 Justification of the Study

Building upon the foundation crafted above, they play an important role in developing the locality, democracy and human rights. In Pakistan, poor and marginalized groups in rural areas can have a chance to produce their own programs, hold discussions and share information in their own language. The findings in this study are adding onto existing knowledge of research conducted on community radio in Pakistan. The study is filling in the gap and building onto existing research by establishing the extent to which community radio in Pakistan can empower local communities, become citizens who are better informed and can effectively participate in governance.

It is hoped that the findings and recommendations in this study will help community radio practitioners in their quest to make rural communities be better informed and use community radio as a tool for development. The findings in the study also indicate the extent to

which community radio programs on gender-based can bring actual change to the local communities in Pakistan. It is hoped that civil society organizations and policy makers in the country will use the findings in the study when formulating policies aimed at enhancing community capacities in the realm of Disaster Management, which is becoming a national crisis.

1.5 Study Objectives

The aim is to establish the role of community radios in empowering local communities and also evaluate whether community media is playing any role in enhancing community capacity through its programming. The following are the objectives of the study:

Review the community radio station's effectiveness in Disaster Risk Management (DRM) with a view to suggest community DRM radio station and its future radio initiatives.

1.6 Research Questions

The following are the research questions for this study:-

a) Main Research Question

How Community Radios in Pakistan can contribute to the empowerment of local communities in the realm of Disaster Management?

b) Sub Research Questions

RQ1. To which extent and with what genres are community radio stations in Pakistan concerned with empowerment of local communities in their programing?

RQ2. How and to what extent are the local people in the communities involved in the programs aired on Community Radio Stations?

RQ3. What is the perception of the listeners on the impact of community broadcast?

Having outlined my research questions, the main focus of this study is, the empowerment of local communities in shaping up their environment and come up as better educated and informed in managing the disasters.

1.7 Justification for Selection of Cases in the Study

This study is centered on establishing the impact of community broadcast in the realm of disaster management in three different communities. The first community is mostly well educated rural community having all the facilities of electronic and print media but has never been struck with a major disaster. Second community is from rural area; not well educated and having limited access to electronic and print media but was hit by major Earthquake in 2005. The third community is also from rural area; not well educated and having limited access to electronic and print media but was hit by another major disaster i-e Floods in 2010. The site survey/ structured interviews in these communities will give a fair idea about the need for community broadcast and its importance for these communities. Moreover the impact of community radios in these areas can also be verified from broadcaster's point of view through selective interviews and structured questions. For this reason, I selected three different communities to give a broader perception of community radios being received in these areas and their overall impact in shaping up the communities.

1.8. Hypothesis

Following are the hypothesis for the study:-

a. **H-1:** Radio is a widely used and fastest medium of information in any community.
b. **H-2**: Radio is reliable and cheapest source of information.
c. **H-3:** Community radio can be trusted to minimize damages during disaster in an urban community.
d. **H-4:** Community radio can be trusted to minimize damages during disaster in a rural community.
e. **H-5:** In urban communities, radio leads the information and contributes towards DRR education.
f. **H-6:** In rural communities, radio leads the information and contributes towards DRR education.
g. **H-7:** Community radio updates people about disasters through community participation.

h. **H-8:** Community radio prepares better and resilient urban communities.

i. **H-9:** Community radio prepares resilient and better rural communities.

j. **H-10:** Community radio provides hope to disaster struck communities.

Chapter No. 2

Pakistan's Profile on Disasters and its Management

2.1 Introduction

Pakistan is situated in the vicinity of longitudes 62 & 75 degrees east and 24 and 37 degrees north and with an aggregate zone of 796,095 square km. Since its independence, Pakistan has been vulnerable to a variety of natural and manmade disasters. From 1947 to 2015, Pakistan has been hit by approximately 232 disasters costing 141131 lives as per Disaster Risk Reduction 2015 report by Global Assessment (Mortality and Eco losses).

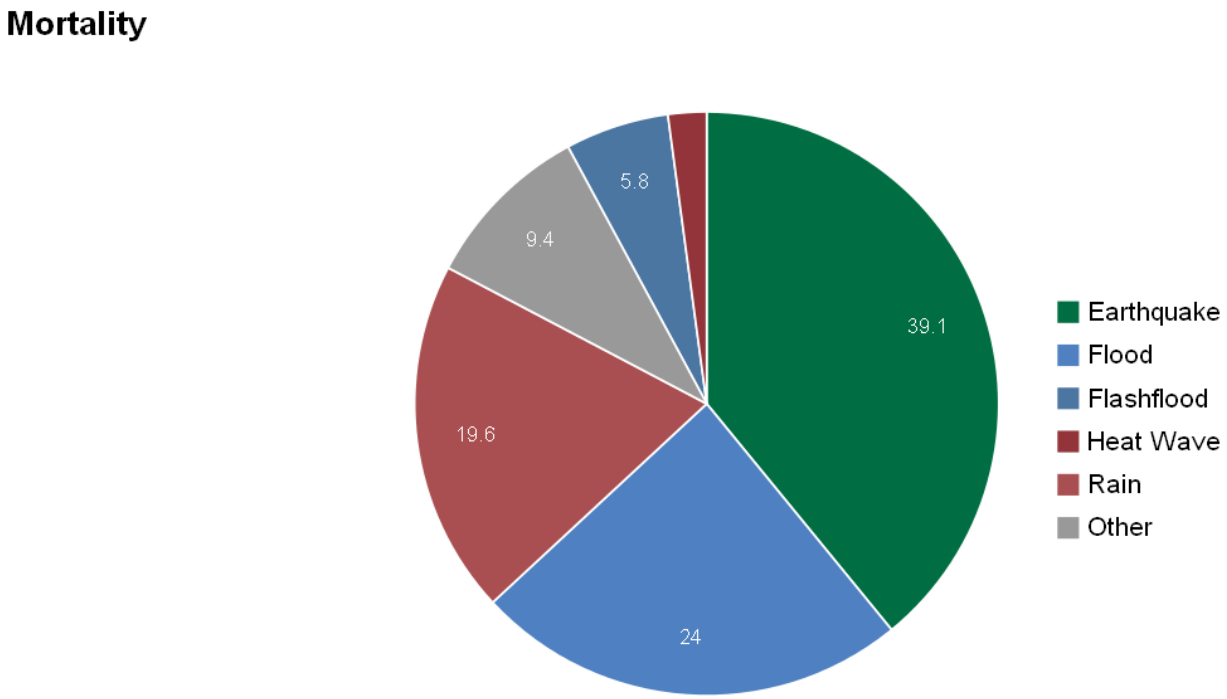


Figure 2.1: Adopted from Disaster Risk Reduction 2015 report by Global Assessment

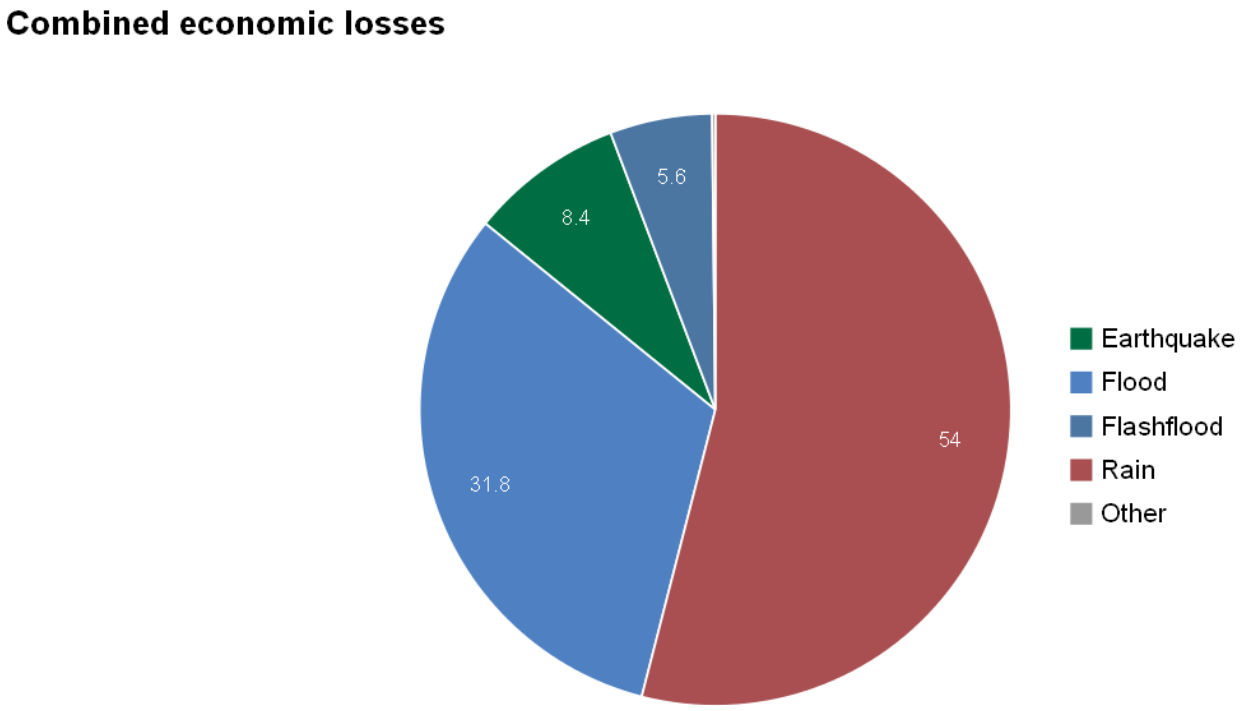


Figure 2.2: Adopted from Disaster Risk Reduction 2015 report by Global Assessment

These high measurements don't imply that relief has never been mulled over; however Pakistan has been curbed by state of mind which has been more responsive in nature. Despite Pakistan's vulnerability to a variety of natural and manmade disasters for reasons varying from topography to population density and poverty, disaster management in the country has historically been reactive rather than proactive (Memon, 2012). Pakistan is considered as a standout amongst the most uncovered and fiasco inclined nations on the planet, particularly as for the expanded events of extraordinary occasions in the in all probability environmental change situations, the image that shows up is very stunning. The key conclusions from the research undertaken by LEADS Pakistan with the support of Oxfam Novib (ON) in 2013 are as under:-

(1) A general lack of awareness and sensitization about DRM, especially at the communities' level.

(2) Working in the reactive rather than proactive mode with a spotlight on disaster reaction and revival instead of prevention and mitigation.

(3) Absence of regular funding and budgeting at the district/city level.

(4) Ambiguity in operational mechanisms with lack of clarity in the definition of roles.

(5) Lack of coordination between various government outfits.

(6) Little or no participation of communities or their representatives in making and implementing DMPs.

(7) Poor enforcement of building codes.

(8) Impact of terrorism in some of the selected cities that detracts from DRM measures.

(9) Absence of multi-risk assessments to feed into DMPs.

(10) Non-optimal use of information furnished by PMD to make an effective EWS.

2.2 Pakistan History in Disaster Risk Reduction

Pakistan is well aware with fiascos which have brought about an overwhelming tally as far as men and material. In any case, because of its lacking readiness to oversee calamities, it has neglected to viably adapt to them. The October 2005 seismic tremor was an unequivocal point of interest in the standardization of DRM exercises in Pakistan. Pakistan's pre 2005 seismic tremor institutional structure was deficient to manage the outcomes of the monstrous quake. A requirement for a blended and general institutional structure was felt that could arrange the national DRM endeavors by making a cooperative energy amongst local and outer organizations to relieve the impacts of future catastrophes. However, after seismic tremor 2005, a precise exertion was outfitted to build up a reasonable structure of catastrophe administration advancing into foundation of NDMA, it still can't seem to accomplish the required benchmarks. The overwhelming surges of 2010 uncovered its ineptness and delicate administration bringing about exceptional extent of misfortunes and harms. Since, the extent of suggestions is too overwhelming to hold up under; the proficient catastrophe administration comes, on the need, second to none of different needs (Maqbool & Dr. Hussain, 2014).

2.2.1. Pre 2005 Disaster Management in Pakistan

Pakistan has been struggling with disaster management since its inception; however few

legislations in the realm of disaster management prior to earthquake 2005 are as following:-

(1) The Punjab National Calamities (Prevention and Relief) Act, 1951

(2) Civil Defence Act was disseminated on 29th April, 1952

(3) Khairpur National Calamities (Prevention and Relief) Act, 1954

(4) West Pakistan National Calamities (Prevention and Relief) Act of 1958

(5) West Pakistan Natural Calamities (Prevention and Relief Act – Extension to Tribal Areas) of 1963

(6) Emergency Relief Cell (ERC) -1970

(7) Federal Flood Commission – 4th January 1977

(8) Pakistan Emergency Service Ordinance and Pakistan Emergency and Fire Code – 2002

(9) Punjab Emergency Service (1122) – 2004

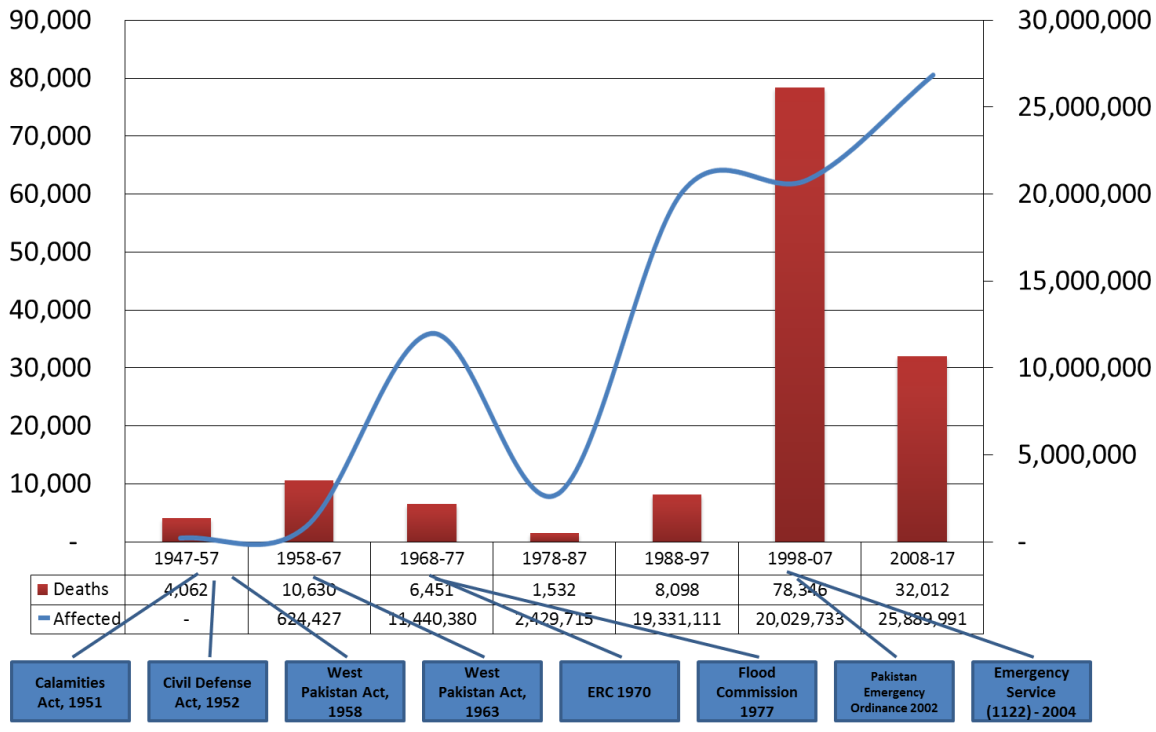


Figure 2.3: Data plotted from EM-Dat

2.2.2. Disaster Management Post 2005

2005 was a turning point for disaster management in Pakistan. Not only was this the year when Pakistan became a signed the Hyogo Framework for Action (HFA), indicating a shift toward more comprehensive disaster management that is proactive as well as being reactive, but also was the year when the country was struck by a devastating earthquake whereby destruction and fatalities occurred over an area of 30,000 square kms in the then N.W.F.P province of Pakistan and some areas of Kashmir which are being under administration of Pakistan. The sheer scale of this disaster exposed Pakistan's susceptibility to disasters and further enforced the commitment to better DRR practices, resulting in the promulgation of following:-

(1) National Disaster Risk Reduction Policy of Pakistan – 2013

(2) National Disaster Management Authority Act (NDMA Act) -2010

   a. National Disaster Management Commission (NDMC) – 2010

   b. National Disaster Management Authority (NDMA) – 2010

   c. Provincial Disaster Management Authority (PDMA)

   d. District & Local Disaster Management Authorities (DDMA)

   e. National Institute of Disaster Management (NIDM)

(3) Earthquake Reconstruction and Rehabilitation Authority (ERRA) – 2005

(4) National Disaster Management Ordinance (NDMO) – 2006

(5) Disaster Risk Management Framework (NDRMF) – 2007

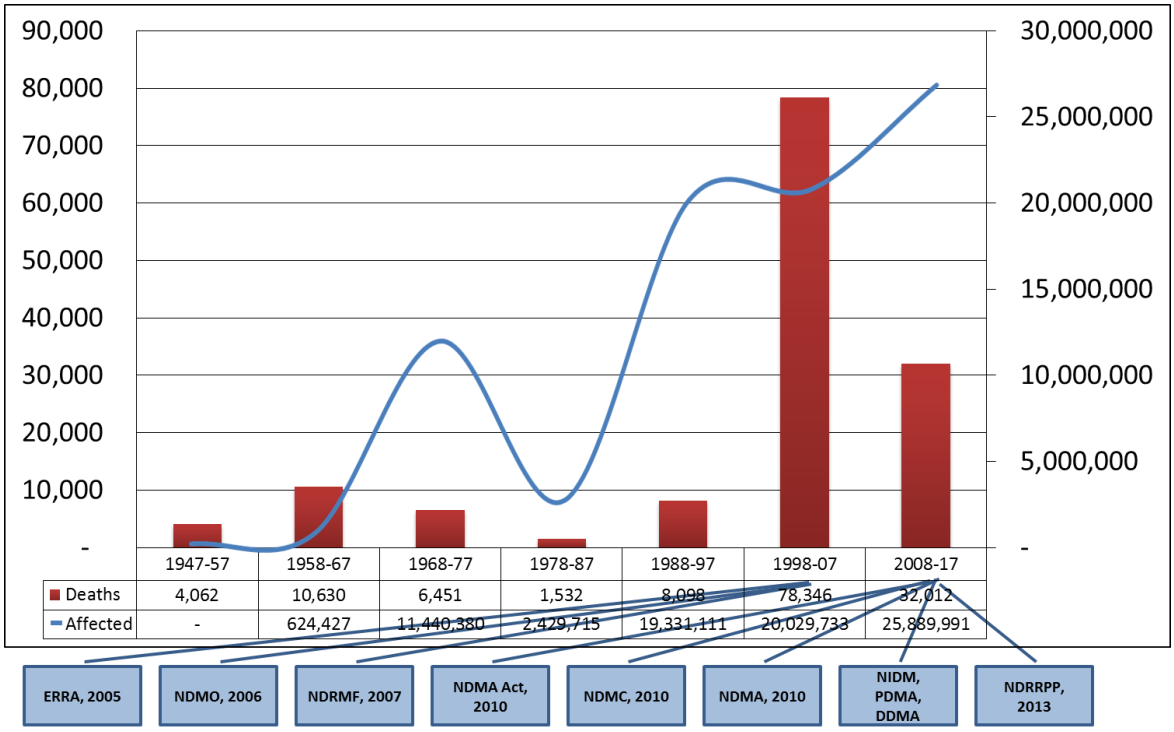


Figure 2.4: Data plotted from EM-Dat

Pakistani society lives in the state of chaos with no clear visibility and direction. This huge mass of 190 million people is presently at the mercy of its Media which is further radiating confusion in the societies. Whether it's Millennium Development Goals (MDGs) or priorities of Hyogo Framework for Action (HFA), the mainstream Pakistani communities will remain ignorant for decays unless they are educated about Disasters Risk Reduction through community media in their native language. This society can perform better than government institutions in the realm of disaster preparedness provided they are given incentives and direction for better shaping up of communities.

2.3 Pakistan's DRM Commitments to the World

As indicated by World Risk Report 2016, the danger of a characteristic occasion transforming into a catastrophe is dependent in part subject to the constraints of the normal occasion itself. The living states of the general population and their reaction are additionally critical. The individuals who recognize what to do in case of an extraordinary normal occasion, have a more noteworthy possibility of survival. Nations that see characteristic dangers coming

and are set up for the results of environmental change will be better arranged for the future (Bundnis Entwicklung Hilft, 2011). Pakistan has been positioned 100 among 171 most defenseless nations which characterizes that it is feebly presented to common perils yet is exceptionally helpless against catastrophes. The World Risk Index is proposed to offer responses to four key inquiries:

Q1: What is the occurrence probability of huge natural disaster? And to what extent it will distress people?

Q2: How susceptible general masses are to natural hazards?

Q3: To what degree can civilisations survive acute disasters?

Q4: Has the community adopted future plans and procedures which are deterrents to natural calamities?

The table below clearly reflects Pakistan's exposure and vulnerability to disasters along with comparison with most safe and most exposed countries of the world (World Risk Report, 2016).

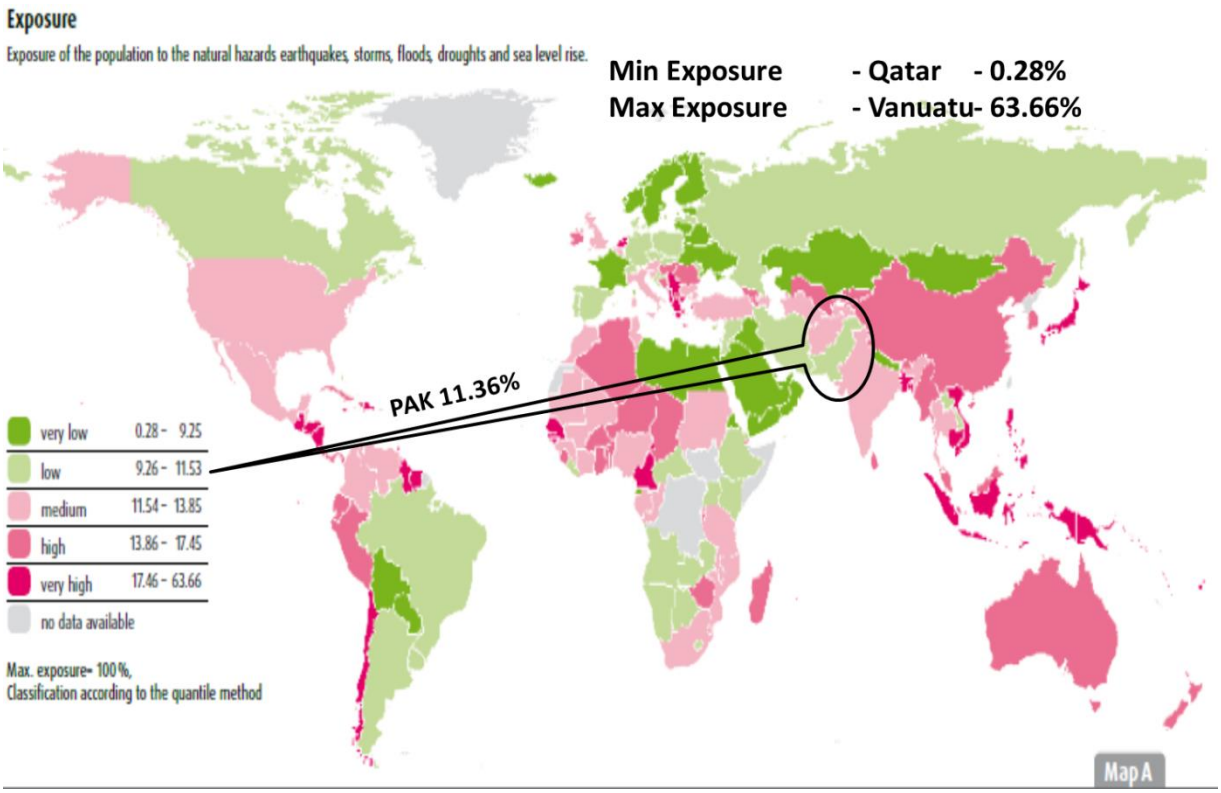


Figure 2.5: Adopted from WRR 2016

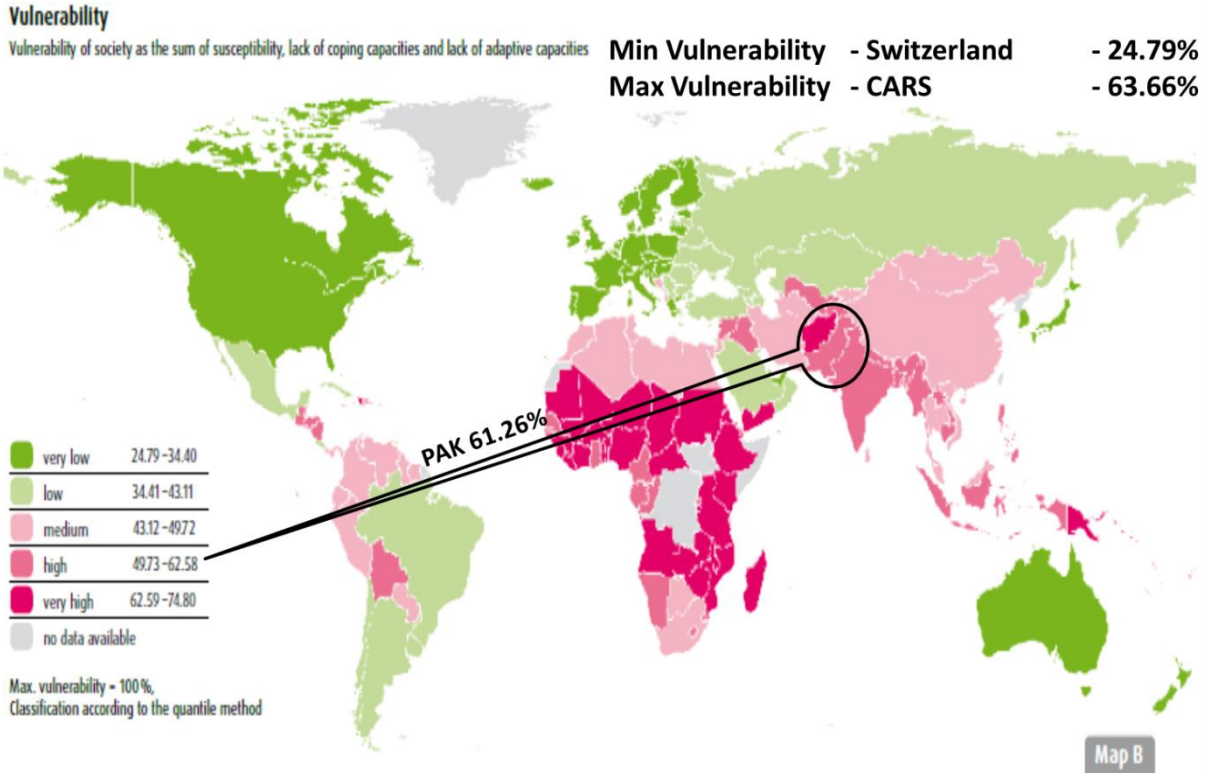


Figure 2.6: Adopted from WRR 2016

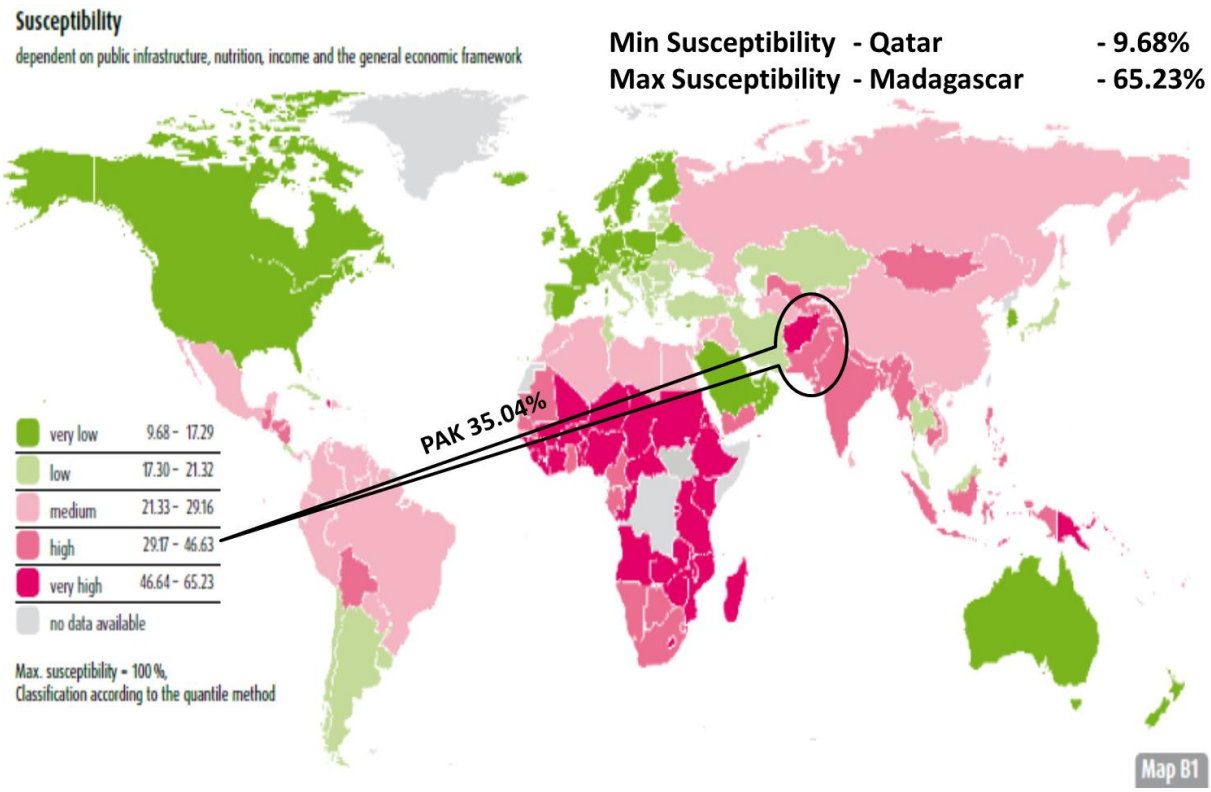


Figure 2.7: Adopted from WRR 2016

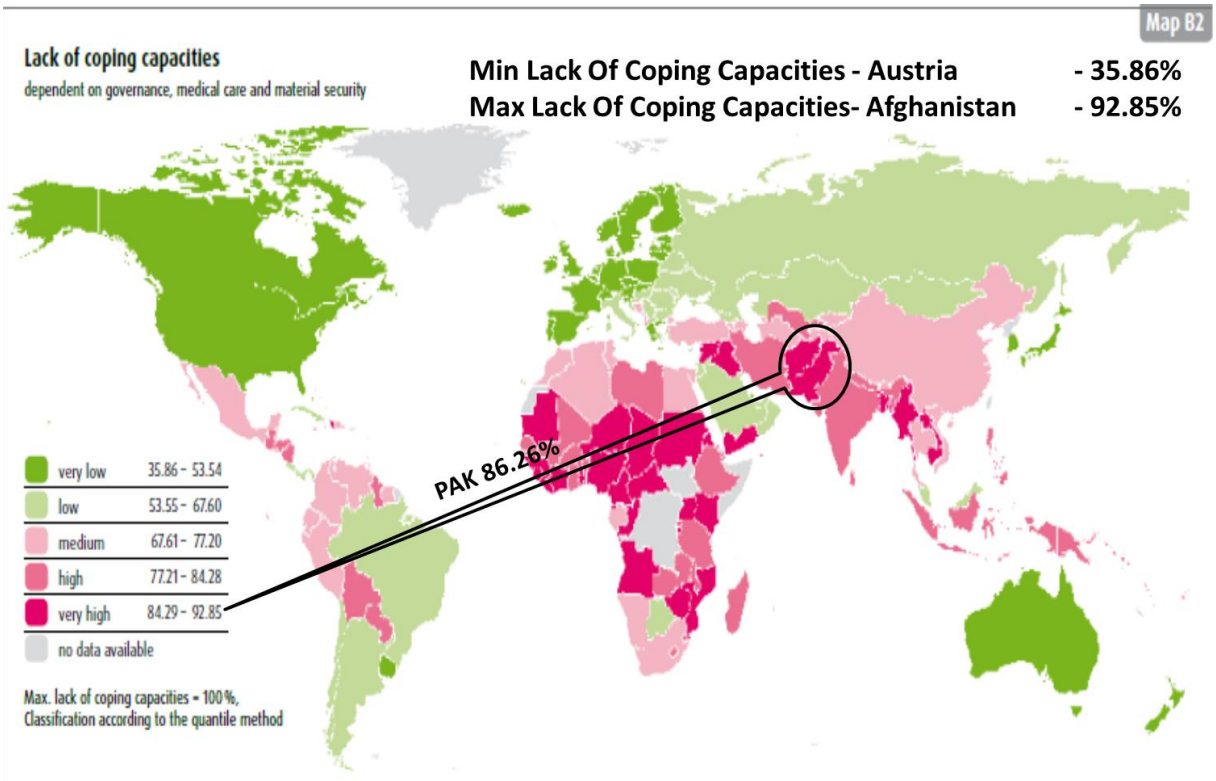


Figure 2.8: Adopted from WRR 2016

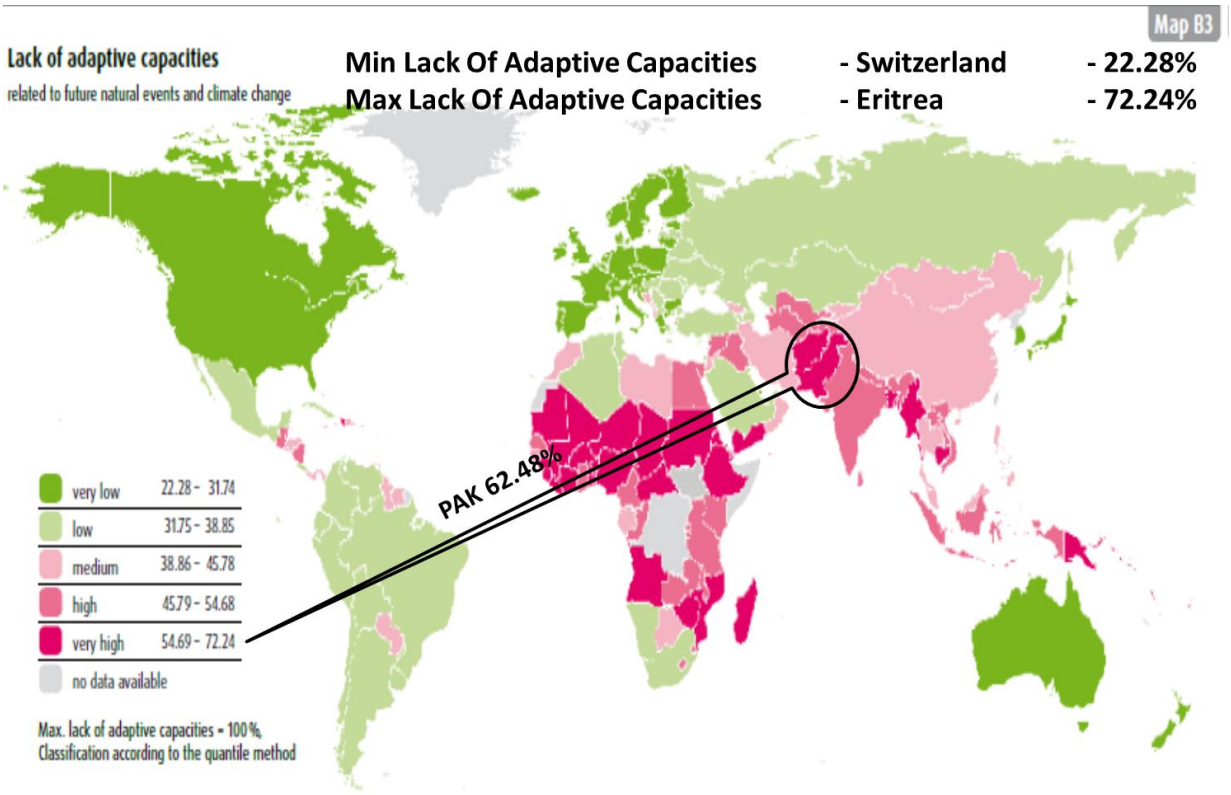


Figure 2.9: Adopted from WRR 2016

Calamity misfortune is on the expansion with serious worries for the presence, nobility and job of people, especially poor people and hard-won improvement picks up. Fiasco hazard is progressively of worldwide concern and its effect and activities in one area can affect chances. This, aggravated by growing susceptibilities acknowledged with surfacing statistic, economic conditions and innovative, impulsive urbanization, advancement inside risk zones, a work in progress, natural debasement, atmosphere changeability, environmental change, topographical dangers, rivalry for rare assets, and the effect of pestilences, for instance, HIV/AIDS, centers to a future where calamities could dynamically weaken the world's economy, and its masses and the sensible change of making countries. In the past two decades, more than 200 million people have been impacted every year by catastrophes. Catastrophe chance develops when perils interface with physical, social, financial and characteristic vulnerabilities. Events of hydro meteorological reason constitute the broad lion's offer of disasters.

In spite of the increasing comprehension and acceptance of the consequence of disaster risk diminishment and expanded debacle reaction limits, debacles and specifically the administration and lessening of peril continue representing an overall test. There is currently universal affirmation that endeavors to diminish calamity dangers must be efficiently incorporated into approaches, plans and projects for manageable improvement and neediness lessening, and bolstered through respective, provincial and worldwide participation, including associations. Attainable headway, dejection reducing, awesome organization and catastrophe chance lessening are usually relentless targets, and with a particular true objective to address the challenges ahead, animated undertakings must be made to produce as far as possible at the gathering and national levels to administer and decrease risk. Such an approach is to be seen as a basic part for the achievement of all around agreed change goals, joining those contained in the Millennium Declaration.

The significance of advancing calamity hazard decrease endeavors on the universal and provincial echelon plus the national and nearby levels has been professed in recently various key multilateral structures and announcements. Pakistan is signatory of extremely vital DRM structure started by United Nations. States are dependable to incorporate debacle hazard lessening contemplations into their feasible advancement approach, arranging and programming at all levels. While each State has essential duty regarding its own particular financial and social advancement, an empowering universal condition is crucial to invigorate and add to building up the information, limits and inspiration expected to construct debacle strong countries and groups.

2.3.1. Hyogo Framework for Action (HFA 2005-2015)

When all is said and done, the Hyogo Framework for Action has given fundamental bearing in attempts to decrease disaster shot and has added to the progress towards the achievement of the Millennium Development Goals. Its utilization has, regardless, featured different gaps in keeping an eye on the shrouded catastrophe risk factors, in the meaning of destinations and requirements for movement, in the need to develop disaster adaptability at all levels and in ensuring agreeable strategies for execution. The cleft show a need to develop an action organized framework that Governments and relevant accomplices can complete in a solid and relating way, and which perceives disaster threats to be supervised and helps theory to

upgrade adaptability. Ten years after the assignment of the Hyogo Framework for Action, failures continue undermining tries to achieve sensible change. Pakistan had been a signatory of HFA and was in charge of its actual usage however no advantageous advance was accomplished in following:-

(1) Making beyond any doubt that fiasco hazard alleviation is a national and a neighborhood priority with a solid institutional reason for work.

(2) Spot, analyze and observe catastrophe threats and augment timely caution.

(3) Use information, development and training to construct ethos of wellbeing and strength at all levels.

(4) Minimize the fundamental hazard aspects.

(5) Strengthen calamity readiness for powerful counter at all levels.

2.3.2. Sendai Framework for Disaster Risk Reduction (2015-2030)

The Sendai Framework for Disaster Risk Reduction 2015-2030 was discussed at the Third UN World Conference in Sendai, Japan, on March 18, 2015. It is the after effect of accomplice interviews began in March 2012 and between authoritative exchanges from July 2014 to March 2015, maintained by the United Nations Office for Disaster Risk Reduction at the request of the UN General Assembly. The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015:

The Sendai Framework is based on components which guarantee progression with the work done by states and different partners under the HFA and presents various developments as called for amid the conferences and transactions. Numerous reporters have distinguished the most huge moves as a solid accentuation on calamity chance administration instead of debacle administration, the meaning of seven worldwide focuses on, the decrease of fiasco hazard as a normal result, an objective concentrated on avoiding new hazard, diminishing existing danger and fortifying versatility, and additionally an arrangement of managing standards, including essential obligation of states to forestall and lessen catastrophe chance, all-of-society and all-of-

State foundations engagement. Also, the extent of fiasco hazard decrease has been widened essentially to concentrate on both common and man-made dangers and related ecological, mechanical and natural perils and dangers. Wellbeing versatility is emphatically advanced all through.

The Sendai Framework likewise expresses the accompanying: the requirement for enhanced comprehension of catastrophe hazard in every one of its measurements of presentation, powerlessness and peril attributes; the reinforcing of debacle hazard administration, including national platforms; responsibility for calamity chance administration; readiness to "Work Back Better"; acknowledgment of partners and their parts; preparation of hazard touchy speculation to dodge the making of new hazard; flexibility of wellbeing foundation, social legacy and work-places; fortifying of worldwide participation and worldwide organization, and hazard informed benefactor strategies and projects, including monetary support and credits from global money related establishments. There is likewise certain acknowledgment of the Global Platform for Disaster Risk Reduction and the local platforms for debacle hazard diminishment as instruments for lucidness crosswise over motivation, checking and intermittent audits in support of UN Governance bodies. UNISDR has been entrusted to bolster the usage, development and audit of the Sendai Framework. There is similarly sure affirmation of the Global Platform for Disaster Risk Reduction and the neighborhood stages for calamity peril diminishment as instruments for clarity transversely finished inspiration, checking and discontinuous reviews in help of UN Governance bodies. UNISDR has been endowed to reinforce the utilization, advancement and review of the Sendai Framework.

Precedence for activity

Precedence 1: Grasping and envisioning calamity danger.

Precedence 2: Solidification fiasco chance administration to control calamity chance.

Precedence 3: Investing in disaster risk mitigation for strength.

Precedence 4: Augmenting calamity preparation for productive reaction and to "Build Back Better" in recuperation, recovery and remaking..

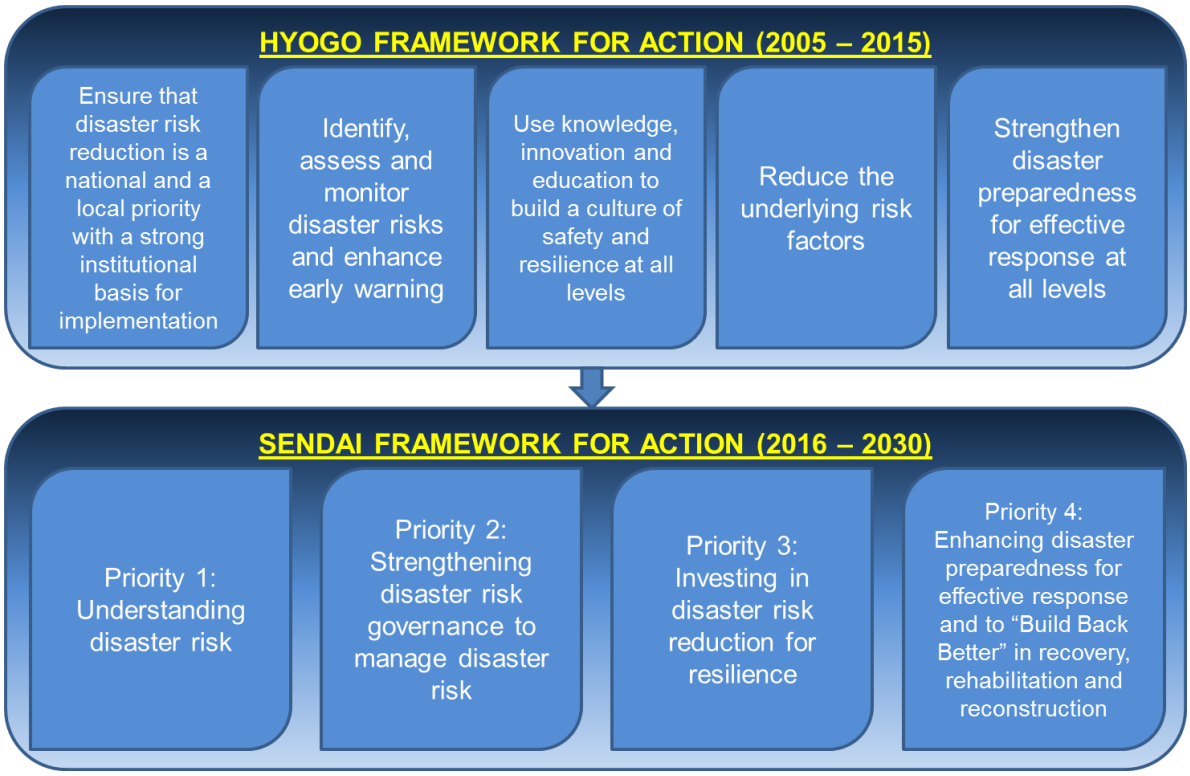


Figure 2.10: Comparison of Hyogo & Sendai framework for DRR

To strengthen the assessment of overall progress in finishing the outcome and goal of the present structure, 7 overall plans were focused on. These targets will be measured at the overall level and will be supplemented by work to make fitting markers. National targets and pointers will add to the achievement of the outcome and goal of the present Framework. The seven overall targets are:

(1) Substantially reduction overall disaster mortality by 2030, which means to cut down the ordinary per 100,000 overall demise rate in the decade 2020– 2030 diverged from the period 2005 – 2015.

(2) Substantially reduce the amount of affected people all around by 2030, intending to cut down the ordinary overall figure per 100,000 in the decade 2020– 2030 appeared differently in relation to the period 2005 – 2015.

(3) Reduce direct fiasco money related setback in association with overall total national output (GDP) by 2030.

(4) Generously decreasing disaster damage to essential system and interference of key organizations, among them prosperity and informative workplaces, including their flexibility by 2030.

(5) Substantially augmenting the amount of countries with national and neighborhood disaster chance diminishing approaches by 2020.

(6) Considerably overhaul widespread joint effort to making countries through adequate and useful help to supplement their national exercises for use of the present Framework by 2030.

(7) Noticeably augmenting the availability of and access to multi-peril early alerted structures and disaster danger information and examinations to people by 2030.

2.4 Millennium Development Goals (MDGs)

As a signatory to the Millennium Declaration, the Pakistan Government is focused on developing the nation's advance towards the Millennium Development Goals (MDGs) and redesigning the lives of all Pakistanis. MDG system has displayed colossally vital in concentrating thought on probably the most key inconveniences opposing Pakistan and the world. MDG's nation report gives a possible examination of Pakistan's available advance. The report examines how much the MDGs have been amalgamated in national strategy and shows how bona fide each MDG has been tended to in the determined national assignments. The motivation driving the Report is to pass on issues to light of all, including the Government, Donors, NGOs, the scholarly gathering, youth, the normal society about the national MDGs. The Report wants to take supply of Pakistan's advance in accomplishing the MDG targets changed according to the states of the nation (Pakistan MDGs, 2013)

Objective 1: Eradicate outrageous poverty and hunger. Comments by GOP: With two out of three focuses off-track, the nation is probably not going to accomplish MDG 1.

Objective 2: Accomplish worldwide fundamental education. Comments by GOP: Pakistan is subsequently off-track on every one of the three points, and thusly not prone to accomplish MDG 2.

Objective 3: Promote sexual orientation equity and electrify women. Comments by GOP: Overall, with every one of the four markers (with set focuses) of this objective off-track, Pakistan is probably not going to meet MDG 3.

Objective 4: Reduce child mortality. Comments by GOP: Disregarding the accomplishments, Pakistan is off-track on 5 out of 6 pointers and subsequently unlikely to achieve MDG 4.

Objective 5: Improve maternal health. Comments by GOP: Overall, Pakistan is off track on all pointers and hence improbable to accomplish MDG 5.

Objective 6: Combat HIV/AIDS, malaria and different diseases. Comments by GOP: Pakistan is off-track on three out of five pointers and in this way far-fetched to accomplish MDG 6.

Objective 7: Ensure natural manageability. Comments by GOP: Overall, with four out of seven markers on track, Pakistan is probably going to accomplish MDG 7 with proceeded with endeavors; this is the main objective where the greater part of pointers are on-track to be achieved.

Objective 8: Develop a worldwide association for development. No remarks by GOP.

2.5 Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are successors to the Millennium Development Goals (MDG). The MDGs were gotten in 2000 by governments to increase overall ground on poverty, preparing, prosperity, appetite and nature. The MDGs ended toward the end of 2015. In the midst of 25-27 September 2015, the part states of the United Nations participated in New York for the United Nations (UN) Summit on Sustainable Development and got the new overall goals for possible change. The world pioneers pledged their feeling of obligation with respect to the new 2030 arrangement for Sustainable Development Goals, including 17 broad and transformative SDGs. The SDGs are a comprehensive course of action of destinations, targets and pointers that all UN part states are depended upon to use to diagram their change inspiration, money related procedures, and exercises towards low carbon pathways for the accompanying 15 years, remembering the true objective to fulfill a down to earth world where 'no one is forsaken' without haggling viability of the planet. These new overall targets are significantly more broad

and complete than the dynamic MDGs, as they endeavor to address each one of the three estimations of viable progression i-e financial, social and normal (LEADS Pakistan, 2016)

Objective 1: End poverty in every one of its structures.

Objective 2: End hunger, accomplish sustenance security and enhanced nourishment, and advance supportable agriculture.in every one of its structures

Objective 3: Ensure solid lives and advance prosperity for all at all ages.

Objective 4: Ensure comprehensive and fair quality instruction and advance deep rooted learning.

Objective 5: Achieve gender fairness and enable all ladies and girls.

Objective 6: Ensure accessibility and economical administration of water and sanitation for all.

Objective 7: Ensure access to reasonable, solid, manageable, and present day vitality for all.

Objective 8: Promote maintained, comprehensive and reasonable financial development, full and gainful business and tolerable work for all.

Objective 9: Build flexible framework, advance comprehensive and manageable industrialization and cultivate development.

Objective 10: Reduce imbalance inside and among nations.

Objective 11: Make urban communities and human settlements comprehensive, protected, versatile and manageable.

Objective 12: Ensure supportable utilization and generation designs.

Objective 13: Take critical activity to battle environmental change and its effects.

Objective 14: Strengthen the methods for usage and renew the worldwide organization for supportable improvement.

Objective 15: Protect, reestablish and advance supportable utilization of earthbound environments, reasonably oversee timberlands, battle desertification and stop biodiversity.

Objective 16: Promote tranquil and comprehensive social orders for economical advancement, give access to equity to all and assemble compelling, responsible and comprehensive establishments at all levels.

Objective 17: Strengthen the methods for usage and rejuvenate the worldwide association for feasible improvement.

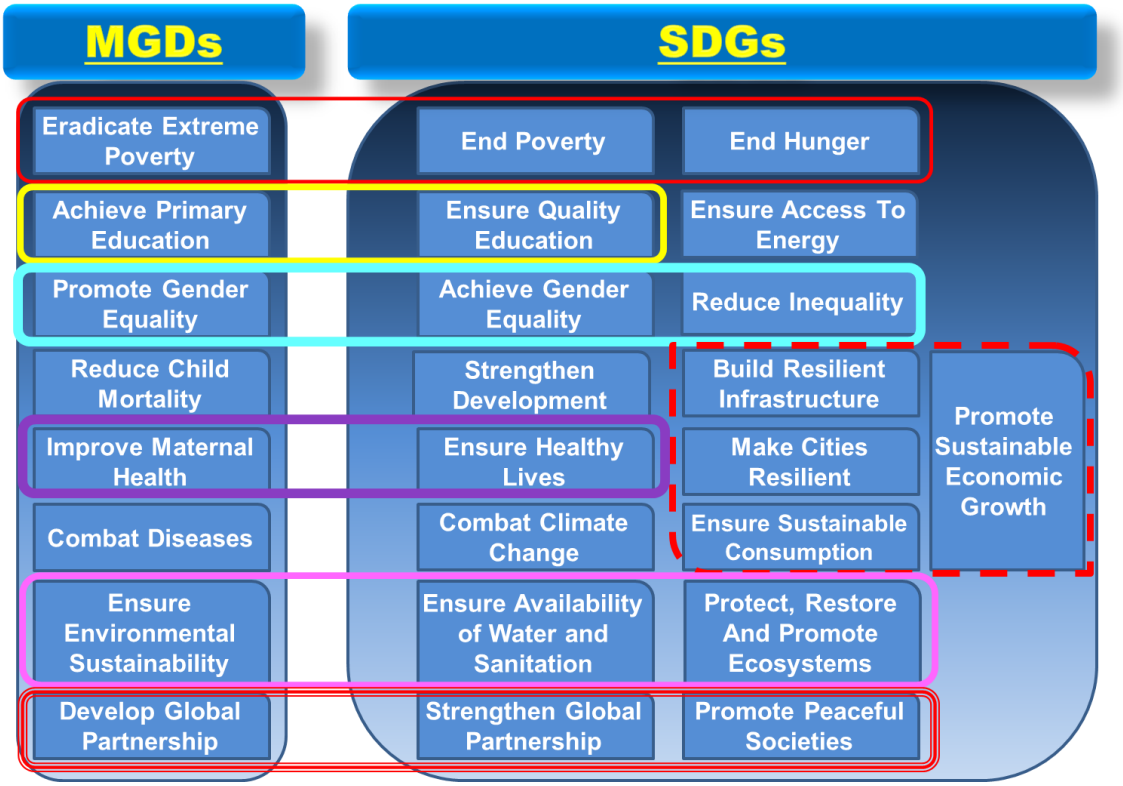


Figure 2.11: Comparison of MDGs & SDGs

Chapter No. 3

Role of Community Broadcast in Disaster Management

3.1 Introduction

Planet earth has more than 20,000 radio stations and more than 2 billion radio receivers. Any rumor that TV or any other modern media will supersede radio is superfluous, for radio is in consistent growth. Its waves have practically reached every sphere of our planet. It is the leading electronic medium of the poor since it shelters the barriers of isolation and illiteracy, and it is the most reasonable electronic medium to communicate and receive.

The latest decades have seen a quick advancement in the number and distinction of group radio stations. Among the illuminations behind this are: the democratization and decentralization frames in many parts of the world; deregulation of the media and the loosening up of broadcasting imposing business models by state foundations; and estrangement with corporate radio channels.

In addition, mindfulness is creating of the social and financial focal points that can come to fruition when standard people approach reasonable information. Besides, it is moreover evident that when people, especially destitute individuals, can appreciate issues that impact their lives, it causes them to push off their regular state of separation and strengthens them to plan and create to help themselves (Colin Fraser and Sonia Restrepo Estrada, 2001: Community Radio Handbook by UNESCO).

Correspondence is fundamental to human life in all parts of the world. The evolvement of present day developments has made it open than whenever in later past, massively extending potential for fiscal and social impact. Today, numerous groups are endeavouring to outfit the energy of correspondence innovation to bring social change and address people's issues. Group media left to make a choice both to national open broadcasters, which are consistently under government control, and to private business media. They outfit groups with access to information

and voice, empowering group's level open pondering, information and data sharing and contribution to open basic leadership. The primary stirrings in the ascent of the present day group's media improvement can be taken after back to the 1940s with the setting up of group radio stations in Bolivia's tin mining groups, educational radio stations of the Catholic Church in Colombia, and non-business FM radio in the United States.

Throughout the latest twenty years, over the Americas, there has been a colossal addition in the amount of standard and groups based radios. These consolidate enlightening radio stations both inside and outside the structures of formal preparing; indigenous people's radio stations that evaluate adjacent lingos and traditions; radio stations continue running by social improvement affiliations, women gatherings, houses of prayer and exchange unions. Group media in Europe is new. While print-based group media conveyances have a more drawn out history, the essential electronic group media was in all likelihood the understudy drove radio station. Radio Station broadcasting is done since 1967 in Slovenia. In 1977, Italy opened its remote transmissions after the Supreme Court declared the state restraining infrastructure unlawful. France followed in 1983 and today most Western European countries have specific regulatory game plan for groups broadcasting. However Eastern Europe, disregarding seismic political change in the 1990s, has still not a lot of countries in which basic culture has an enormous nearness in the remote transmissions.

The early advancement for groups broadcasting in Europe was driven by the ascent of unlicensed FM broadcasting, with regulatory frameworks taking after later. Today the Internet has transformed into a key section point for new group media (Steve Buckley, 2011 Community Media: A Good Practice Hand Book:).For example, group radio exercises far and wide are giving destitute people a voice, enabling them to incite their own change, for instance, pushing for rights or propelling social learning and trade. For some remote groups, radio remains the most open mechanical medium available. Group radio speaks to impressive specialist in offering measurements to nearby people. There are a couple of events in Japan and abroad in which group radios transformed into the prime vehicle for information sharing for groups in the midst of emergency lightening and furthermore post catastrophe rebuilding. Group radios also expect a basic part in fiasco DRR, especially in pre-calamity preparation and help. In any case, all together for group radio to play its compelling part, investment, association and responsibility for

nearby group is critical (Church World Service, 2007).

3.2 Defining Community

As indicated by UNESCO, the "communities" can be 'regional or land' or 'a gathering of individuals with normal interests, who are not really living in one characterized region (Tabing 2002, p11). Additionally, the AMARC characterizes it as a 'communities or gathering of individuals sharing basic characters and additionally interests' (Mtimde 1998, p13). The key factor in the various definitions is that community is an identified 'group', not simply a mass of people that the broadcasting signal happens to cover.

3.3 Community Broadcast

"Community broadcasting will be communicating from communities to the communities, covering regular occasions and issues identified with financial, legislative issues or culture in the dialects talked and comprehended inside a geographic range or a communities of interest"(Ian Smith, 2008).

"Community broadcasting is intended to satisfy social and cultural needs by enabling individuals from the communities to take an interest in choices about programming and, on account of radio, in the ownership of stations. It serves local communities, mirroring the assorted qualities of their perspectives and needs, and gives access to volunteer members. It is public broadcasting, however it is not financed by an administration or a legislature by government" (Historic Canada, 2005).

Human rights and development authorities have noticed that individuals confronted with social and financial prohibition additionally confront systemic deterrents to opportunity of expression that are related with the states of neediness, low levels of instruction and education, poor foundation, absence of access to power segregation et cetera. Community media have turned into a fundamental means by which the voiceless can practice their entitlement to opportunity of expression and access to data. Community broadcasting by and large alludes to communicate media which are autonomous, common society based and which work for social advantage and not for personal benefit. The key factor in the various definitions is that

community is an identified ‘group’, not simply a mass of people that the broadcasting signal happens to cover.

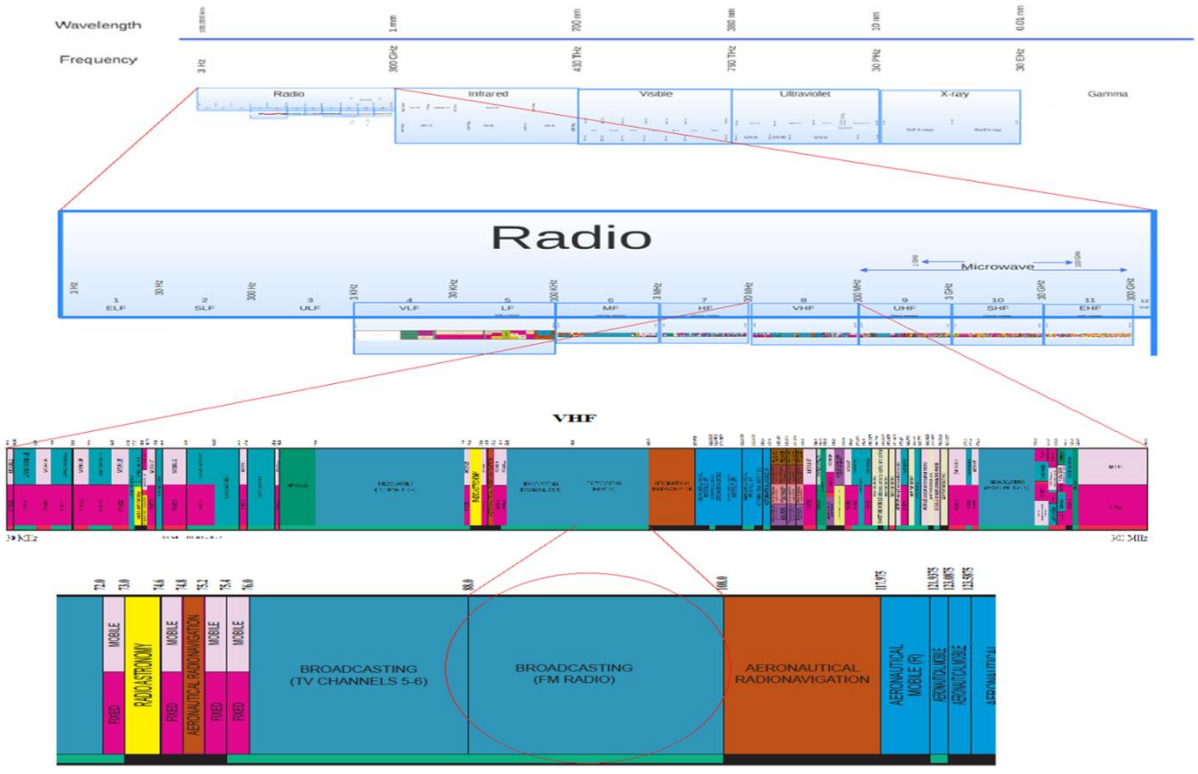


Figure 3.1: Electromagnetic spectrum

3.4 Disaster Management

Cataclysms have brutally affected individuals since the start of our reality. In like manner, individuals and social requests alike have made many undertakings to lessen their introduction to the results of these calamities, making measures to address introductory impact, and what's more post-disaster response and recovery needs. Despite the approach got, these undertakings have a comparable target: catastrophe administration.

The rousing contemplations that guide debacle administration—the decline of damage to life, property, and nature — are, as it were, is the same throughout the world. The capacity to finish this mission is not the slightest bit uniform. Despite political, social, money related, or

diverse reasons, the doomed truth is that a couple of countries and a couple of districts are more capable than others in talking the issue. Regardless, no nation, poor or rich are thought totally safe from disasters' negative effects. Besides, the improvement of an overall economy makes it harder to contain the consequences of any disaster inside one country's edges.

“Disaster Management as a subject basically manages administration of assets and data to the extent a shocking occasion is concerned and furthermore how viably and flawlessly one facilitates these assets. Fiasco administration, at the individual and authoritative level, manages issues of arranging, planning, correspondence and hazard management”(SatishModh, 2010).

“Catastrophe administration intends to reduce, or avoid, the potential disasters from dangers, ensure quick and appropriate help to losses of cataclysm, and fulfil brisk and fruitful recovery"(Corina Warfield, 2002).

"The Red Cross and Red Crescent social orders describe fiasco administration as the affiliation and organization of advantages and commitments in regards to dealing with each and every caring piece of emergencies, particularly status, response and rebuilding to diminish the impact of cataclysms".

"Catastrophe administration is the development of courses of action through which groups are less presented to dangers and cataclysms. Debacle administration does not dismiss or discard the threats; rather, it focuses on making courses of action to decrease the effect of catastrophes. Powerlessness to make a plan could provoke human mortality, lost salary, and damage to assets. Events secured by fiasco administration join exhibitions of dread based persecution, current harm, fire, disastrous occasions, (for instance, tremors, tempests, et cetera.), open issue, mechanical setbacks, and correspondence dissatisfactions" (Wikipedia)

3.4.1 Goals of Disaster Management

- Reduce, or avoid, losses from hazards;
- Assure prompt assistance to victims;
- Achieve rapid and effective recovery.

3.4.2 Disaster Management Cycle

The Disaster organization cycle speaks to the on-going methodology by which governments, associations, and basic culture suspect and diminish the impact of cataclysms, react in the midst of and expeditiously taking after a fiasco, and figure out how to recover after a catastrophe has happened. Reasonable exercises at all concentrations in the cycle incite more unmistakable status, better notification, diminished frailty or the foresight of disasters in the midst of the accompanying accentuation of the cycle. The whole catastrophe administration cycle joins open strategies and plans that either change the reasons for fiascos or relieve their consequences for individuals, property, and framework. This usually involves five phases:

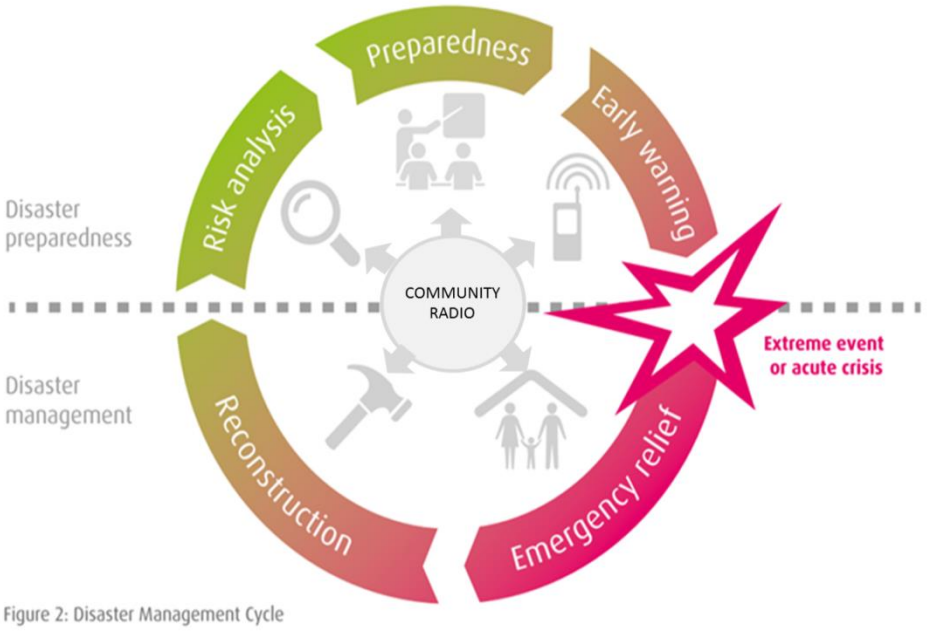


Figure 3.2: Adopted from WRR 2016

3.4.2.1. Risk Analysis

3.4.2.2. Preparedness

3.4.2.3. Early Warning

3.4.2.4. Emergency Relief

3.4.2.5. Recovery

3.5 Community Radio and Social Change

Communities based radio is considered by numerous (Dagron 2001; Patil 2007; UNESCO 2001; AMARC 2007) as one of the most ideal approaches to reach and enable minimized and remote communities for social change. As per Fraser and Restrepo-Estrada (2002), different sorts of media 'don't compete'. It has the benefit of being low in cost. It can protect social character, noteworthy with the globalization of data and satellite correspondences (Dagron 2001). Subject to the political and social condition, it can go about as a stage for verbal confrontation, dialog and thoughts - giving individuals 'a voice'. As German author Brecht (1932) imagined in the nineteen thirties, it can make the audience hear as well as speak (Brecht 1932)

A classic community radio station is portrayed by programs which are delivered by local individuals, in the local dialect or vernacular, and discusses locally pertinent issues. It is not quite the same as public radio since open administration radio regularly takes into account a substantially bigger gathering of people, and the majority of the programming is finished by communicating experts. In community radios, the gathering of people is constrained to a couple of towns or areas, and the programming is completed by local individuals, who for the most part have had no related knowledge in radio. Lastly, community radio is a medium which is acknowledged internationally, in helping the communities/marginalized groups express their conclusion on different matters concerning the communities, and in addition discuss nearby advancement issues. Both of which, private and public radio can just do to a constrained degree. The key idea of Community Radio (CR) is that of giving the voiceless a voice. Indeed, even in spots where there is extraordinary neediness, it has been appeared through many reviews that what individuals esteem the most is to have a voice. This implies they esteem their entitlement to stand up on what is influencing them, stand up on their character, and address archive their lifestyles, societies and conventions. Accordingly, people community radio is frequently observed as giving a voice to the individuals who are regularly voiceless. This implies that community radio ought to dependably incline towards individuals who are minimized in the public arena and give them a chance to talk. For instance, in India, people community radios could give chances to communities having a place with the Dalits, minorities, individuals with incapacities, senior residents, tribal, and so on.

The potential benefits of radio for the task are four: time, cost, adequacy in localness. The potential that radio has as to time is the most obvious. Regardless of the possibility that the dissemination of sets supports the urban zones, the distribution of inferior transistor sets through rural regions is adequate to ensure virtual coverage of most of nations. The second potential encouraging position is cost. There have been various assessments of expenses for radio and TV and the proportion for creation/transmission costs ranges from I to 4 and up. A current information based cost consider by Jamison and Klees (1973) affirms what others have demonstrated previously (Chu and Schramm 1968; General Learning Corporation 1968), i.e., that expenses are around I to 4 for generation and transmission for radio. Reception costs are harder to analyse on account of an extensive variety of collector costs; the integration of this part may support radio much more. Another cost thought imperative to most nations is the level of specialized workers to operate a radio rather than a television system. The third potential that radio has is its viability. There is continuing debate over the comparative effectiveness of radio vs. television because little direct comparative evidence exists (Jamison, Suppes and Wells 1973; Jamison and Klees 1973). Lastly, radio has certain focal points in limiting the provincial improvement exertion. It is a generally cheap medium contrast to TV (however see Bourret 1971 for a low cost TV system) which takes into consideration making local stations that serve a moderately constrained territory with homogenous dialect, culture and interests (Gwyn 1972). Programming may teach as well as strengthen nearby values that might be undermined by prevailing gatherings restless to "build up" a minor range or gathering (Schmelkes 1973). Adjoining stations, broadcasting in local dialects, can; add to the arrangement of nearby issues and give a voice to their gatherings of people through a more fitting input instrument (Mills 1972: McAnanv 1972).

3.6 Role of Community Broadcast in Disaster Management

The part of community's radio can be found in the genuine circumstances in light of individuals' day by day encounters since individuals utilize their own particular media to satisfy their need and to help them to answer their issues. The utilization of community radio as a medium in managing cataclysmic events is extraordinary developing pattern in the contemporary world. On 26 December 2004, the Indian Ocean earthquake measuring 9.3 on the Richter scale brought about a mammoth wave which crushed beach front locales of several nations. Aceh, the

western most territory in Indonesia, turned into the area most exceedingly terrible influenced by the tidal wave. Along several kilometres of coastline in this area, 180,000 individuals were killed and houses and structures were straightened, making more than 500,000 individuals homeless. The tsunami made devastated areas became isolated areas because the damage communication infrastructure.

Donor associations, household and worldwide, assembled community radio stations to help individuals to get data. Since the tsunami in Aceh, the utilization of community radio in calamity region has been well known. It has been utilized by locals at grass roots level for natural disaster management in Indonesia (Allen, 2006). Community radio could give media of communication and information among influenced individuals, and also between the general population and different performing artists, for example, NGOs and local government. Since local communities radio play in restricted issues, individuals could utilize the radio to impart among themselves keeping in mind the end goal to recuperate their injury, engage and teach community individuals in recovery and remaking stages.

An outcome of the close connection between media, for example, community radio and the communities is that the people involved definitely comprehend the issues of the communities. In this way, community radio was utilized by individuals at grassroots level in managing catastrophic events management. In this specific situation, it was found that community radio volunteers progressed towards becoming cutting edge journalists in the crisis. Community radio stations demonstrated that they could give particular data of disaster hit communities, particularly in catastrophic event influenced by territories. Their role started as crisis relief community radios, which later developed as radios for recovery and construction. In a few regions, community radio stations work in supporting communities based catastrophe readiness by serving individuals with convenient and early warning data. Community radio can work as media for individuals' mindfulness about calamity hazard management. With continuation of introduction, individuals will know about their circumstance, including the potential perils from their condition. In this specific situation, the more noteworthy the presentation to disasters, the more noteworthy the enthusiasm for catastrophic management

Group radio can expect basic part in a debacle administration through advancing readiness,

cautioning and restoration programs some time recently, amid and after any calamity in the beach front territories. In the pre-catastrophe arrange, group radio can propel social ranger service, which is the strategy for making greenbelt progression. Group radio can scatter the messages of posted warnings, indigenous strategy for managing stress i.e. atmospheric conditions, on medicinal guide, emergency sustenance, collecting in tropical storm shield particularly space and on sanitation practice and workplaces in the midst of emergency and earlier or in this manner. Moreover, individual group radios can consider course of action for emergency responses. In the midst of the catastrophe organized groups radios would be able to work in notice spread in nearby dialect/highlights. Adjacent youths can shape a volunteer social affair as group radios can work using radio messages for fruitful notoriety for planning. For the fruitful piece of groups radio in a calamity administration, the Community Radio staff should be properly prodded and radio undertakings should be arranged with much emphasis on the fiasco readiness (Bazul Rehman, 2009).

Radio is seen as a low value medium, especially suited to accomplish remote groups and is especially convincing in reaching people impacted by catastrophes when distinctive techniques for correspondence are bothered. Terrestrial radio conveys are intense in giving helpful, critical and sensible information to people who are dumbfounded and demoralized by the impact of a crisis. Communicate data is particularly useful in conditions where physical access is troublesome and help responders may take a couple of days or weeks to achieve affected groups (United Nations, 2016).

Group radio has pragmatic involvement in giving neighborhood data to the nearby people. There are a couple of cases in Japan and abroad in which group radio transformed into the prime vehicle for information sharing for groups in the midst of debacles notwithstanding post catastrophe recuperation. Group radio in like manner expect a basic part in misfortune chance lessening, especially in pre-catastrophe readiness and alleviation through mindfulness raising that objectives diverse group gatherings However, all together for group radio to play its viable part, investment, inclusion and responsibility for neighborhood group is critical (Church World Service, 2007).

Chapter 4

COMMUNITY BROADCAST, IMPACT IN DIFFERENT COUNTRIES

4.1 Introduction

One of the primary group radio stations to be begun on the planet was a radio station begun by mineworkers in Bolivia in the 1940s. The radio station was for the most part expected to speak to the issues identified with the mining business in Bolivia from the worker's perspective. From that point onward, group radio has spread quickly to most parts of the world, with South Asian nations (like India, Pakistan, Sri Lanka, Afghanistan, Bhutan) being generally late contestants. In Latin American nations like Brazil, Guatemala, Argentina, people group radio stations are vigorously political in nature. They are associated with individuals' developments, which are generally associated with issues concerning individuals' rights on themes, for example, the privilege to pick a political applicant, ideal to instruction, and so forth. Besides, the social and formative part of the congregation has been perceived, and religious establishments like the congregation have been permitted to communicate on radio.

In European nations, the community radio development has been for the most part observed as a solid contrasting option to prevailing press. Regularly, these community radio stations speak to view focuses and assessments of the general population in the city, which are frequently absent in standard and private media. These radio stations likewise offer chances to autonomous artists and society artistes who don't get an opportunity to play their music on other media. In Africa and now in Asia, community radio has been generally observed as a medium which can help being developed of the general population and enhance their personal satisfaction.

4.2 United States

Lately, community radio has truly been established in US. It has been developed to stand out amongst the most vital sort of communication. Americans have built up their Mass Media, by

guaranteeing the interest of their group by the fullest. There are more than 100 authorized community radios in US, empowering the overall public to be a dynamic piece of the general public. To achieve this dynamic stage, community radio in US went through many stages.

a. The Origin of Community Oriented Radio. Community broadcast originated in US in era of 2nd World War. It was used by both, radio industry and the government. They used to convey the message as well as publicize their products too**.**

b. Community Radio in 1960s & 70s. In 1960s, Pacifica stations became more focused on youth. They completely changed their listening audience and become more entertainment oriented. By the end of the decades, commercial broadcasting struck the market and targeted more populated markets of cities like Boston. 70s became more focused on civil rights, for which they had to face many problems, even imprisonment of the owners. This political and cultural agitation in 60s and 70s brought a new horizon of thinking and intellectual freedom.

c. The National Federation of Community Broadcast (NFCB). Development continued in this field even after Vietnam War. In 1975 there were 25 community broadcast station, which united to form a body to regulate their efforts and concerns. These included bilingual broadcasting stations too. Since the inception of NFCB, community broadcast have seen a rapid growth in every aspect.

To make this mode to broadcast viably and effectively amid disasters they had invested a great deal of energy and assets to develop the system. They have ensured that radio is the most huge and intense method of broadcasting. Despite the fact that the vast majority of the group broadcasting is more centered on commercial broadcasting now days, yet at the same time in the desperate hour, it's their most intense weapon.

4.3 Ghana

Improvement in community radio system has not only helped in technology growth, but also in improved livelihood and efficient response to any calamity. In Ghana, community broadcast is very systematically divided in sectors, and even funds are allocated according to the needs and requirements of each sector. They use the same community broadcast for various

purposes, like

a. Education and livelihood improvements

b. Communication and information sharing

c. Sharing the agenda of local governments

d. Income through increased economic activities

e. Cultural promotion and entertainment

f. Social cohesion

g. Disaster management

They have made sure that the culture of listening to community radio is embedded in their society so, when need be, it can be used effectively and efficiently. It has encouraged intended communities to chip in programmed activities and reproduce skills attained. Community Radio should continue to play its role well by encouraging its listening communities in different Districts to keep reliance and support to the community and station alike.

4.4 Zambia

Zambia is one of the low and middles salary nations, inferable from that; it does not have the data required if there should be an occurrence of catastrophe and any inevitability. Since 2009, a number of community channels have started to increase the literacy rate, regarding disaster and health management. This community radio is being heard in around 100 square km region for every group radio station. This most prevalent of which being Namwianga Radio. Its central goal is to "Lead and attract audience to God and Jesus Christ through greatness in programming that stresses socially applicable data, news, training, wellbeing, farming, and significant amusement which is identified with the groups."

It's fundamentally a charitable association, which aides in disaster and wellbeing of management as after autonomy for British in 1964, Zambia is for the most part under turmoil of a corrupt authority. They now guarantee that this community broadcast in each remote area of

the nation will be restricting the causalities during disasters. They endorse such conduct by giving programming that is appropriate and group centered, which handle group particular issues and concerns.

Experience has additionally identified that behavioral changes were noticeable by effective broadcasting of community radios. The same have also been tried by Bertrand and Anhang who led a precise survey of broad communications drive having significant target of giving data about HIV/AIDS or sexual wellbeing and had extremely positive reactions. Another idea of entertainment education is likewise there, where individuals are educated about disasters in light mode, utilizing some excitement attributes. Later when the overview was done, individuals were discovered more taught about calamities and their precautionary measures.

Chapter 5

RESEARCH METHODOLOGY

The purpose of this study is to examine the role of community radio in the realm of disaster management and studying its significance on making communities resilient. This is a quantitative study. This part is concerned about the methods adopted to carry out this study. It includes research propose, sampling and data gathering technique, and data analysis method.

5.1 Research Design:

This study inspects the role of community radio in the realm of disaster management and studying its significance on making communities resilient, respectively. The type of research is causal. A field survey approach was used for this study which is the most suitable tool to get opinions from others.

5.1.1 Sample:

The sample for this research consists of residents of three major areas (i) People of swat (Earthquake, flood and terrorism struck area), (ii) Rajanpur (Flood struck area) and Rawalpindi (General Population). Total of 100 questionnaires were filled by different respondents.

5.1.2 Sample Size:

A total of 300 self-administered questionnaires were floated in different areas, 300 questionnaires were received back of which 100% were completed and could be utilized for the analysis purpose. The response rate came out to be 100% which was excellent.

5.2 Data Collection:

We have used non probability sampling. Convenience sampling, a form of non-probability sampling, was used as the sampling frame of objective population was not accessible. This sampling method required less time and cost as compared to other sampling techniques. It also helped choosing the sample size in a swift and economical way.

The objective population in this study was (i) People of Swat (Earthquake, flood and terrorism struck area), (ii) Rajan Pur (Flood struck area) and Rawalpindi (General Population)

5.2.1 Demographics of the Sample:

In this study demographics of the respondents were also asked, which were controlled during the regression analysis. The results showed that 70% of the total respondents were male while the remaining 30% were female.

5.3 Control Variables:

The demographic details which were collected during the study were regarding gender, age, living and education. The effects of the above were controlled during the regression analysis.

5.4 Instrument Development:

In this study information was gathered through structured questionnaire. Instrument utilized was the self-overseen questionnaire containing closed ended questions. This study used hypothesis testing to establish the impact the role of community radio in the realm of disaster management and studying its significance on making communities resilient. Questionnaires were developed by me and pilot testing was also done. Questions were measured on a 5 point likert scale where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

5.5 Independent Variable:

The independent variable in this study was community radio and the scale used to measure this variable was developed by me. Scale consisted of 7 items which were accepted after reliability test.

5.6 Dependent Variable:

There were two dependent variables in this study; those were community resilience and disaster management. The scale used to measure this variable was developed by me. Scale consisted of 13 items each, which was accepted after reliability test.

5.7 Ethical Considerations

Contribution in the research was voluntary and seclusion of responses was made sure by not recording the name and departments of the respondents. In addition, informed approval was ensured through proper briefings and all out efforts were made to avoid any influences/biases while recording the data.

Chapter 6

DISCUSSION &ANALYSIS

6.1 Reliability Analysis for all Communities

Community	Cronbach's Alpha
Swat	.826
Rajanpur	.780
Rawalpindi	.773

The above table of reliability analysis reveals that questionnaires were reliable because all three variables Community Radio, Disaster Management and Community Resilient fall within the range of 0.7 to 0.99 under the Cronbach's Alpha reliability test.

6.2 Correlation Analysis Swat:

	1	2	3
Community Radio	1		
Disaster Management	.991*	1	
Community Resilience	.993**	.987*	1

****. Correlation is significant at the 0.01 level (2-tailed).**

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

The above table depicts that the relationship among variables community radio, disaster management and community resilience. The correlation between community radio and disaster management is 0.991 which show that variables have strong positive relation with each other. The correlation between community radio and community resilience is 0.993 which depict that both variables have strong positive relation with each other. The correlation between disaster management and community resilience is 0.987 which reveals that positive relation exist between variables. All the values of correlation are significant at 0.01 level (99 %).

6.3 Regression Analysis Swat:

Model Summary

Predictor	Outcome		
		DM	
	B	R Square	R Square Change
Control Variables	-.13	.072	.072
Community Radio	.971**	.981	.982**

a. Dependent Variable: DM

b. Predictors: (Constant), CR

**Relation is significant at the 0.01 level.

In above table, the value of β in step I is positive and significant which shows a positive relationship between control variables and dependent variable. In step II value of β shows that 1 unit increase in independent variable brings 0.971 points change in dependent variable which is a significant change. Hence showing CR is positively impacting DM.

6.4 Regression Analysis Swat:

Model Summary

Predictor	Outcome		
		DM	
	B	R Square	R Square Change
Control Variables	.75	.071	.071
Community Radio	.983**	.985	.985**

a. Dependent Variable: DM

b. Predictors: (Constant), CR

**Relation is significant at the 0.01 level.

In above table, the value of β in step I is positive and non-significant which shows a positive relationship between control variables and dependent variable. In step II value of β shows that 1 unit increase in independent variable brings 0.983 points change in dependent variable which is a significant change. Hence showing COR is having positive impact on DM.

6.5 Correlation Analysis Rajanpur:

	1	2	3
Community Radio	1		
Disaster Management	.882*	1	
Community Resilience	.756**	.772*	1
			.

****. Correlation is significant at the 0.01 level (2-tailed).**

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

The above table depicts that the relationship among variables community radio, disaster management and community resilience. The correlation between community radio and disaster management is 0.882 which show that variables have strong positive relation with each other. The correlation between community radio and community resilience is 0.756 which depict that both variables have strong positive relation with each other. The correlation between disaster management and community resilience is 0.772 which reveals that positive relation exist between variables. All the values of correlation are significant at 0.01 or 0.05 level (99 % / 95%).

6.6 Regression Analysis Rajanpur:

Model Summary

Predictor	**Outcome**		
		DM	
	B	R Square	R Square Change
Control Variables	.13	.052	.057
Community Radio	.71**	.71**	.081**

a. Dependent Variable: DM

b. Predictors: (Constant), COR

**Relation is significant at the 0.01 level.

In above table, the value of β in step I is positive and non-significant which shows a positive relationship between control variables and dependent variable. In step II value of β

shows that 1 unit increase in independent variable brings 0.71 points change in dependent variable which is a significant change.

6.7 Regression Analysis Rajanpur:

Model Summary

Predictor	Outcome		
	DM		
	B	R Square	R Square Change
Control Variables	.75	.071	.071
Community Resilience	.77**	.77	.68**

a. Dependent Variable: DM

b. Predictors: (Constant), CR

**Relation is significant at the 0.01 level.

In table 3, the value of β in step I is positive and non-significant which shows a positive relationship between control variables and dependent variable. In step II value of β shows that 1 unit increase in independent variable brings 0.77 points change in dependent variable which is a significant change.

6.8 Correlation Analysis Rawalpindi:

	1	2	3
Community Radio	1		
Disaster Management	.56*	1	
Community Resilience	.43*	.32*	1

****. Correlation is significant at the 0.01 level (2-tailed).**

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

The above table depicts that the relationship among variables community radio, disaster management and community resilience. The correlation between community radio and disaster management is 0.56 which show that variables have strong positive relation with each other. The correlation between community radio and community resilience is 0.43 which depict that both

variables have strong good relation with each other. The correlation between disaster management and community resilience is 0.32 which reveals that average positive relation exist between variables. All the values of correlation are significant at 0.05 level (95 %).

6.9 Regression Analysis Rawalpindi:

Model Summary

Predictor	Outcome		
	DM		
	B	R Square	R Square Change
Control Variables	.13	.052	.057
Community Radio	-.38	-.38	-.021

a. Dependent Variable: DM

b. Predictors: (Constant), COR

**Relation is significant at the 0.01 level.

In above table, the value of β in step I is positive and non-significant which shows a positive relationship between control variables and dependent variable. In step II value of β shows that 1 unit increase in independent variable brings -0.38 points change on negative side on dependent variable which is also not significant change.

6.10 Regression Analysis Rawalpindi:

Model Summary

Predictor	Outcome		
	DM		
	B	R Square	R Square Change
Control Variables	.75	.071	.071
Community Resilience	-.57	.57	-.32

a. Dependent Variable: DM

b. Predictors: (Constant), CR

**Relation is significant at the 0.01 level.

In above table, the value the value of β in step I is positive and non-significant which shows a positive relationship between control variables and dependent variable. In step II value of β shows that 1 unit increase in independent variable brings -0.57 points change on negative side on dependent variable which is also not significant change.

6.11 Summary of Hypothesis:

Hypothesis	Accepted/Rejected
H1	Rejected
H2	Accepted
H3	Rejected
H4	Accepted
H5	Rejected
H6	Accepted
H7	Accepted
H8	Rejected
H9	Accepted
H10	Rejected

Question No. 01: Radio is a faster medium of information than T.V, Newspapers and Mobile Phone					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	20	35	09	28	08
Rajanpur	14	50	09	21	06
Swat	15	35	07	30	13
Total	49	120	25	79	27

Table 6.1: Data collected for corresponding Q1.

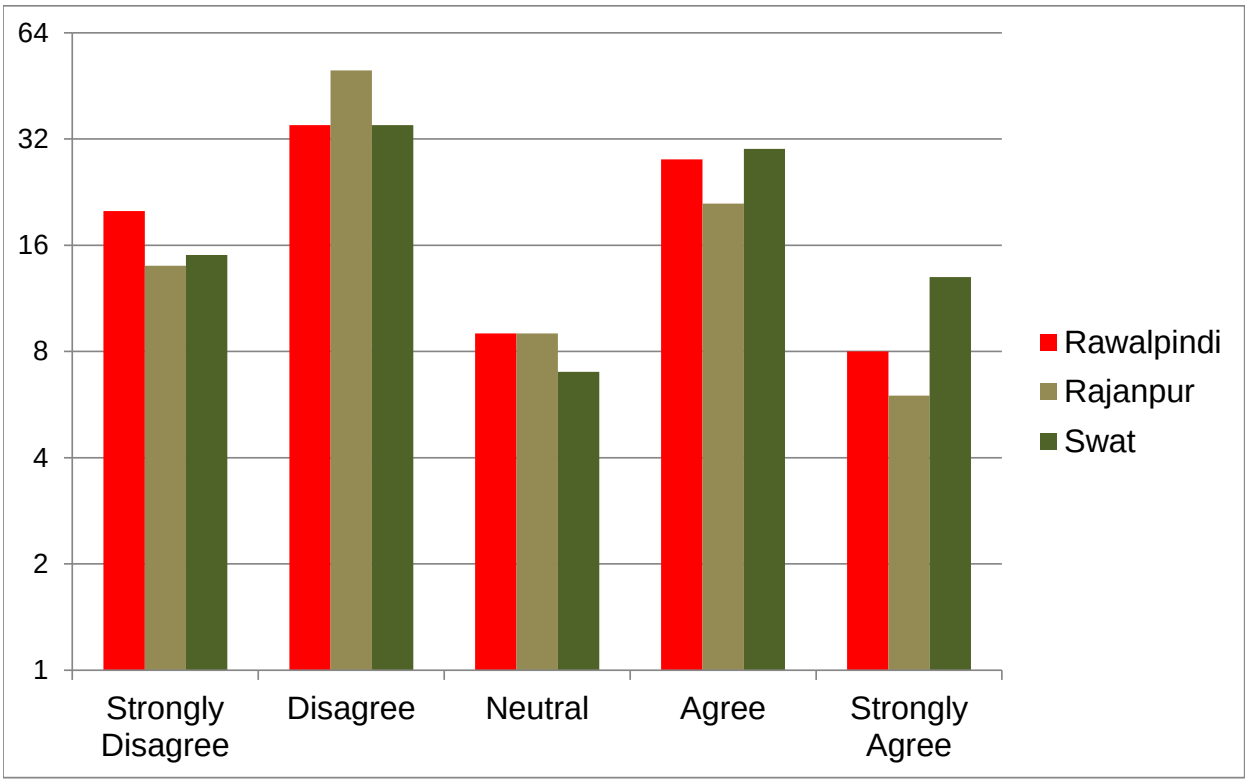


Figure 6.1: Data plotted for corresponding Q1.

Question No. 02: Radio is a cheaper source of information than T.V, Newspapers and Mobile					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	09	20	05	51	15
Rajanpur	09	23	08	45	15
Swat	10	22	08	46	14
Total	28	65	21	142	44

Table 6.2: Data collected for corresponding Q2.

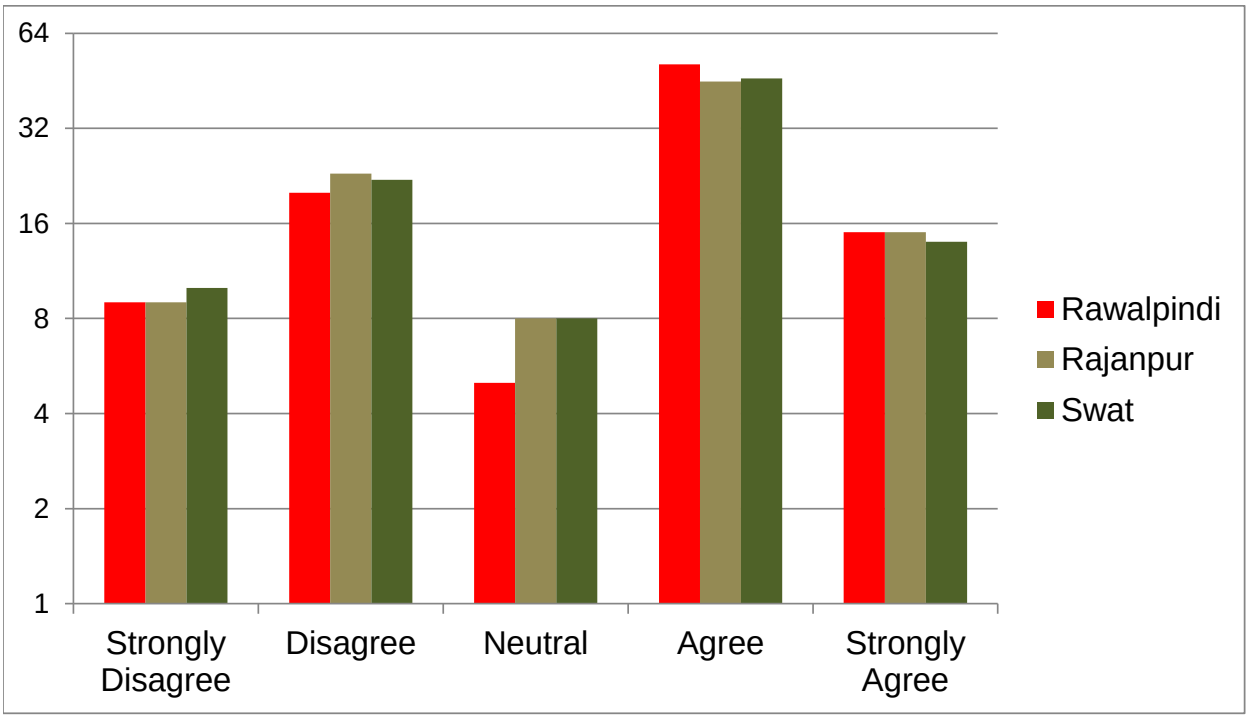


Figure 6.2: Data plotted for corresponding Q2.

Question No. 03: Radio is widely used than T.V, Newspapers and Mobile Phone					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	15	36	10	28	11
Rajanpur	16	38	07	30	09
Swat	14	37	08	29	12
Total	45	102	25	96	32

Table 6.3: Data collected for corresponding Q3.

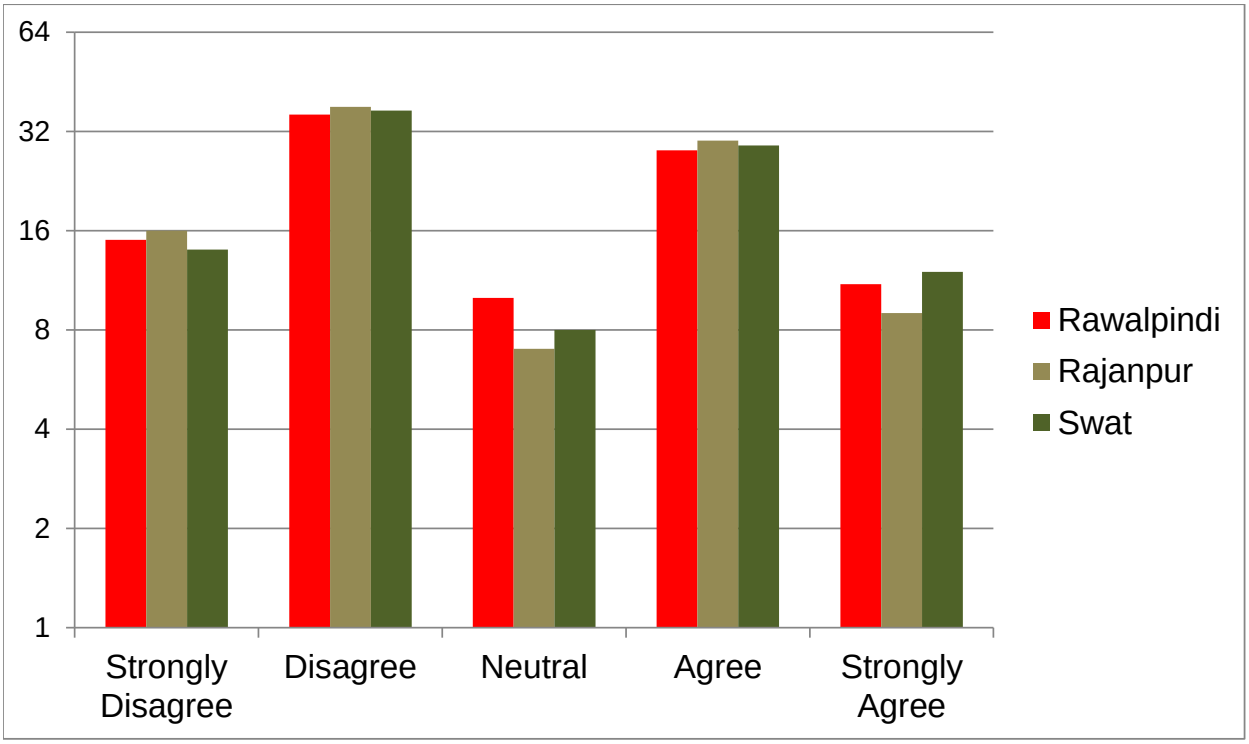


Figure 6.3: Data plotted for corresponding Q3.

Question No. 04: Community Radios can be used to minimize the damages in a disaster					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	16	37	07	30	10
Rajanpur	15	18	13	37	17
Swat	11	28	08	37	16
Total	42	83	28	104	43

Table 6.4: Data collected for corresponding Q4.

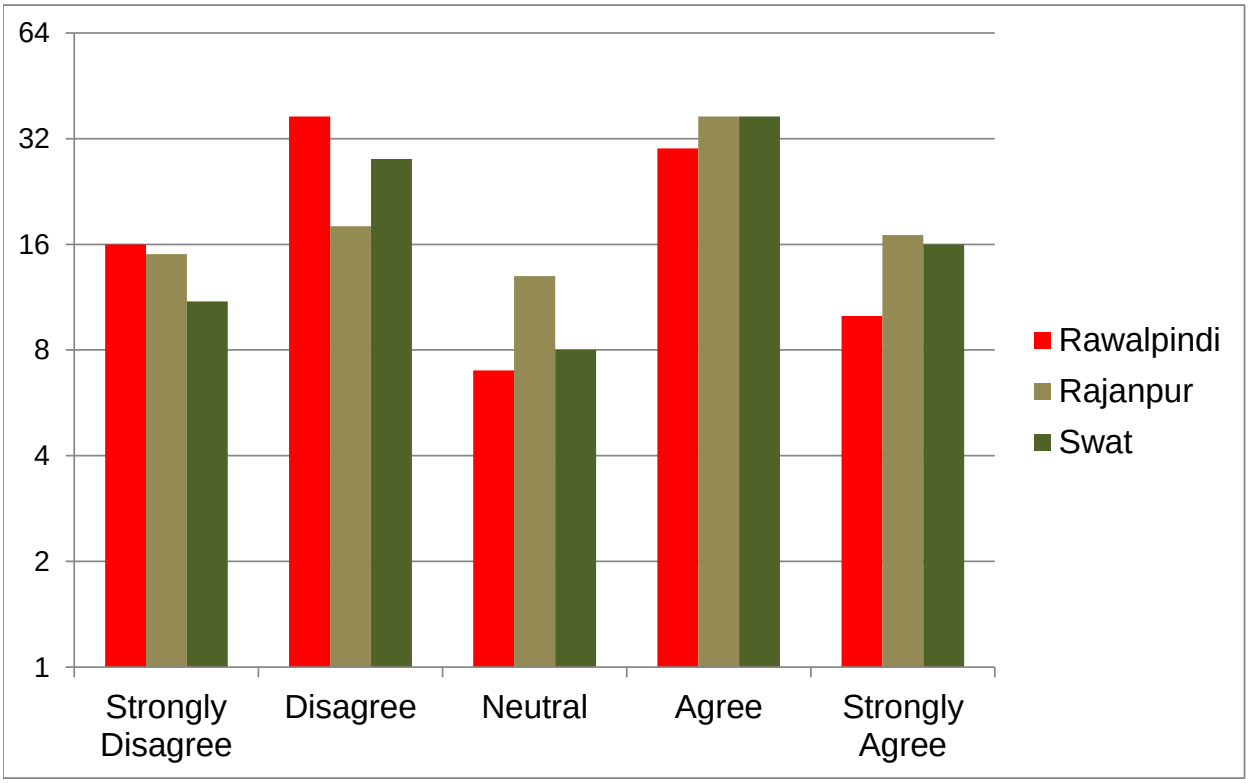


Figure 6.4: Data plotted for corresponding Q4.

Question No. 05: Community Radio can be trusted as a tool for early warning source					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	12	38	09	24	17
Rajanpur	13	21	06	41	19
Swat	13	31	06	35	15
Total	38	90	21	100	51

Table 6.5: Data collected for corresponding Q5.

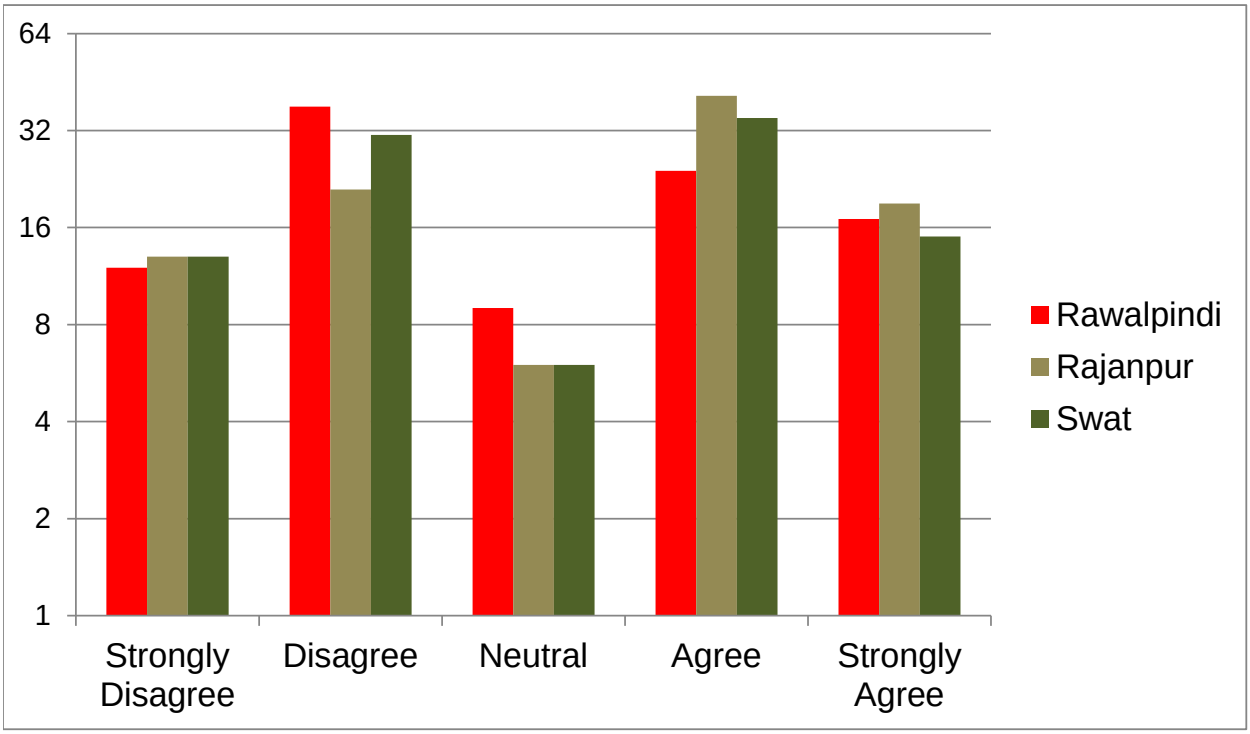


Figure 6.5: Data plotted for corresponding Q5.

Question No. 06: Communities can be made resilient by Community Radios than any other sources					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	13	41	08	25	13
Rajanpur	15	20	08	42	15
Swat	11	15	10	45	19
Total	39	76	26	112	47

Table 6.6: Data collected for corresponding Q6.

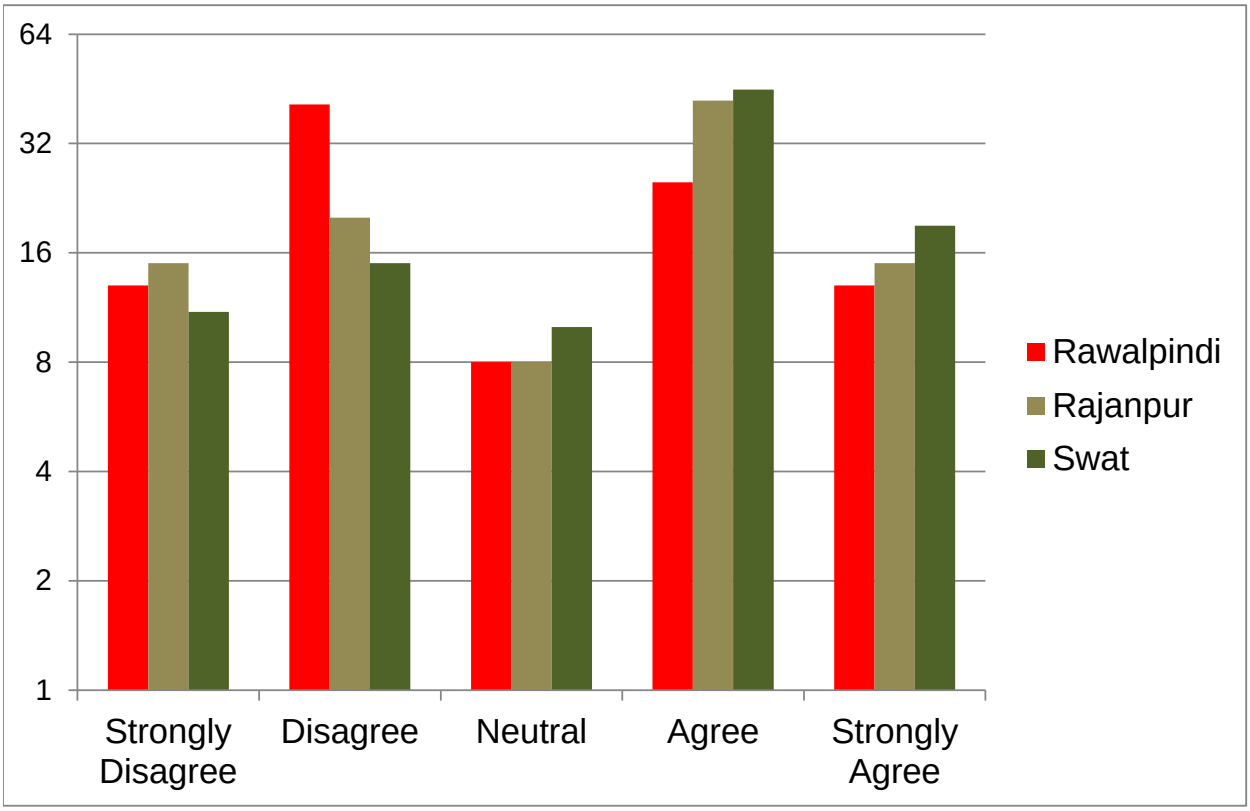


Figure 6.6: Data plotted for corresponding Q6.

Question No. 07: Community radio plays a leading role in information sharing in case of any disastrous event					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	18	33	09	25	15
Rajanpur	14	27	08	39	12
Swat	16	20	07	44	13
Total	48	80	24	108	40

Table 6.7: Data collected for corresponding Q7.

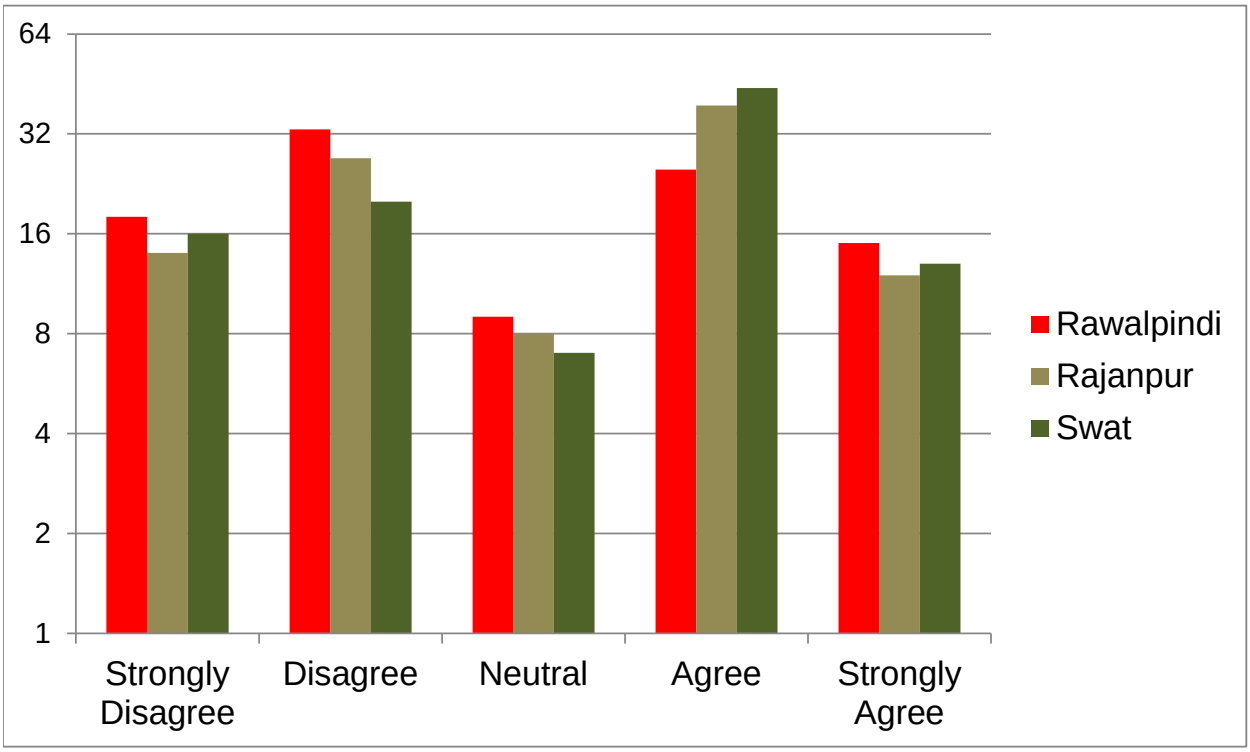


Figure 6.7: Data plotted for corresponding Q7.

Question No. 08: During preparedness phase, community radios contribute towards disaster mitigation by educating communities about disasters					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	15	39	09	26	11
Rajanpur	12	21	09	45	13
Swat	10	15	10	53	12
Total	37	75	28	124	36

Table 6.8: Data collected for corresponding Q8.

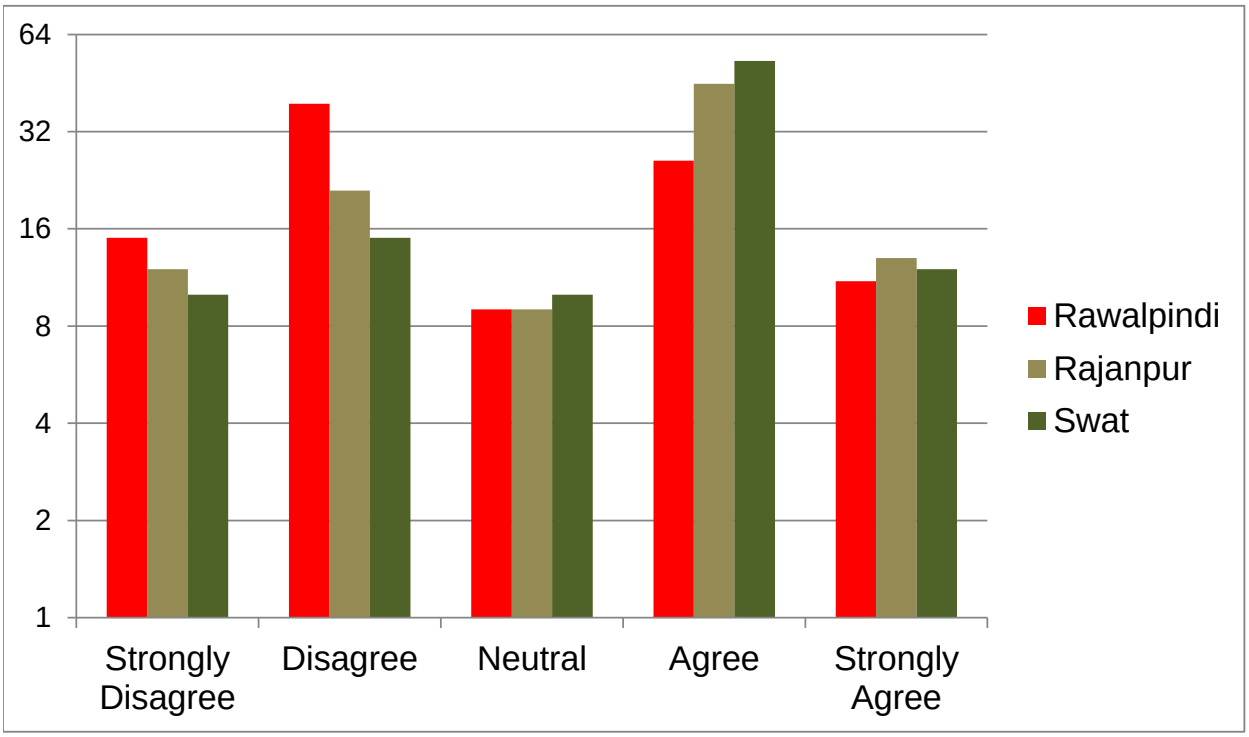


Figure 6.8: Data plotted for corresponding Q8.

Question No. 09: Community radio updates people about disaster situation					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	13	23	10	42	12
Rajanpur	17	21	07	37	18
Swat	10	15	06	39	30
Total	40	59	23	118	60

Table 6.9: Data collected for corresponding Q9.

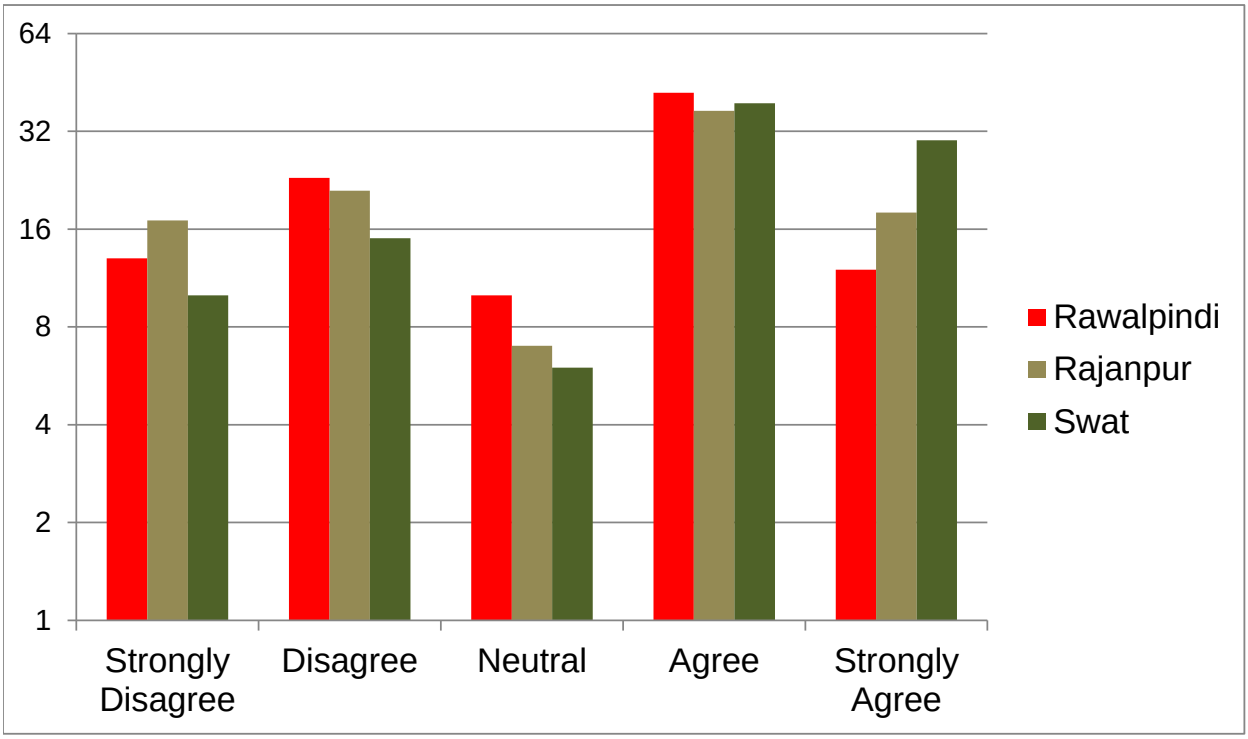


Figure 6.9: Data plotted for corresponding Q9.

Question No. 10: The information shared by community radios is more reliable than that found on social media like Facebook, twitter etc					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	14	39	08	23	16
Rajanpur	10	23	11	41	15
Swat	13	17	11	45	14
Total	37	79	30	109	45

Table 6.10: Data collected for corresponding Q10.

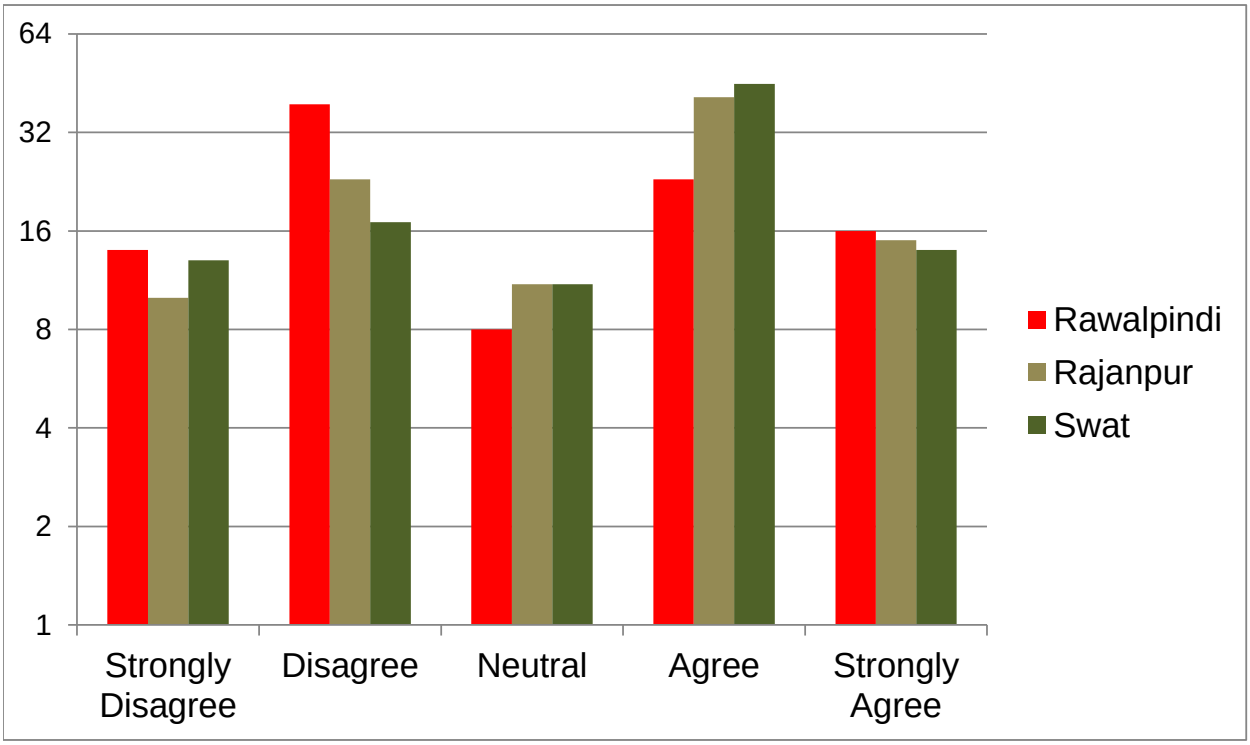


Figure 6.10: Data plotted for corresponding Q10.

Question No. 11: Community participation is the hall mark of community radios					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	11	23	06	45	15
Rajanpur	16	25	07	32	20
Swat	13	25	08	43	11
Total	40	73	21	120	46

Table 6.11: Data collected for corresponding Q11.

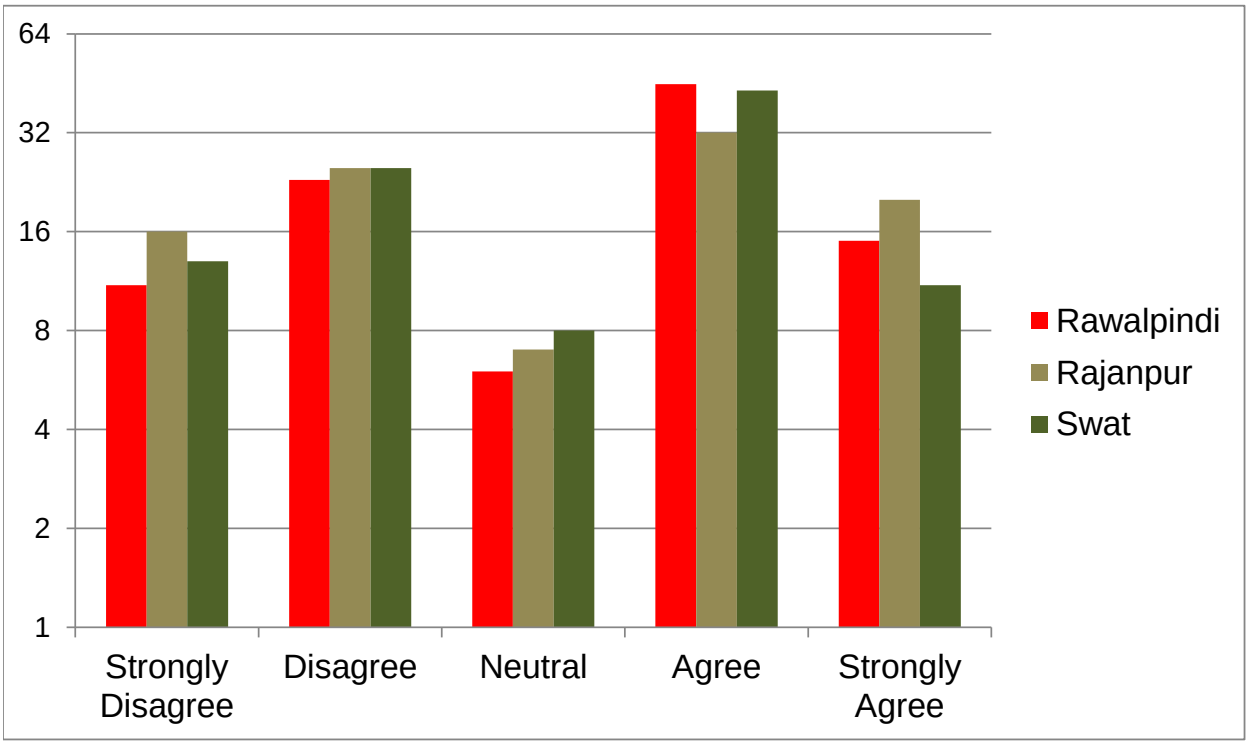


Figure 6.11: Data plotted for corresponding Q11.

Question No. 12: Community radios prepare better communities for the next disaster					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	13	39	08	31	09
Rajanpur	15	22	11	36	16
Swat	14	23	10	37	16
Total	42	84	29	104	41

Table 6.12: Data collected for corresponding Q12.

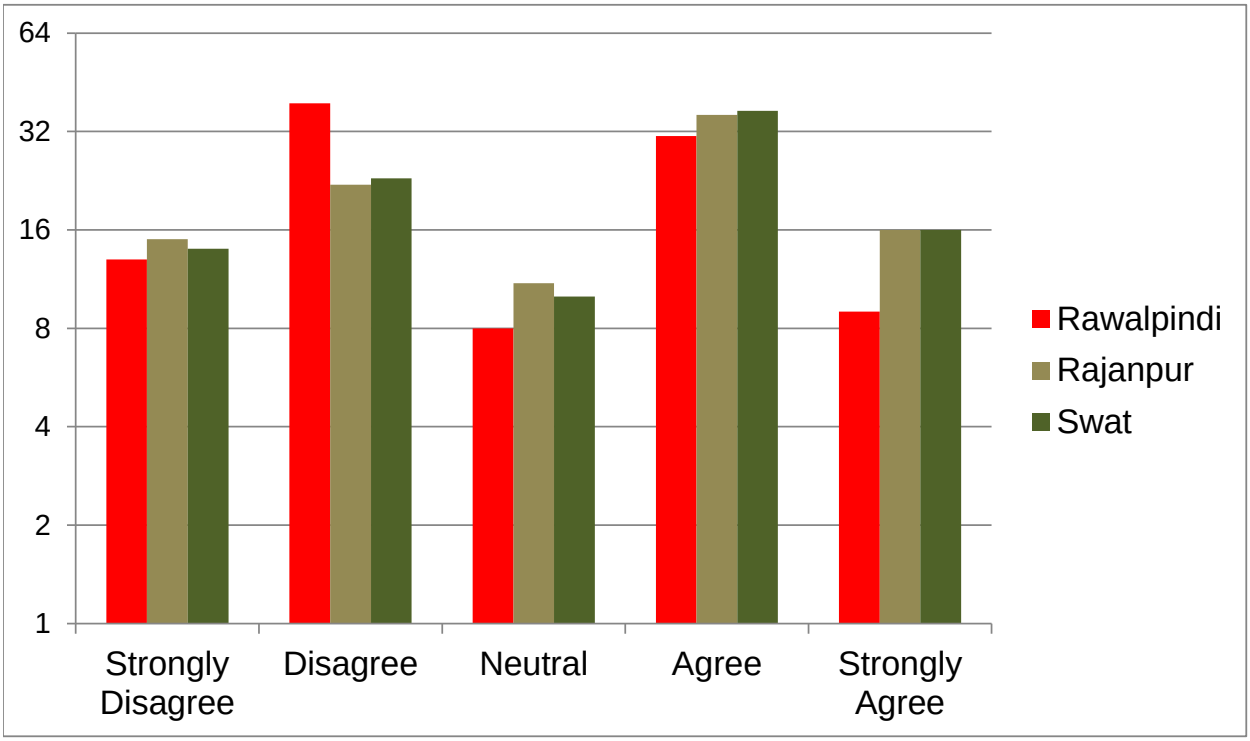


Figure 6.12: Data plotted for corresponding Q12.

Question No. 13: Community radios provide hope to disaster struck communities more than any other communication media					
Community	Recommendations				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Rawalpindi	14	37	09	32	08
Rajanpur	14	40	12	27	07
Swat	17	66	09	00	08
Total	45	143	30	59	23

Table 6.13: Data collected for corresponding Q13.

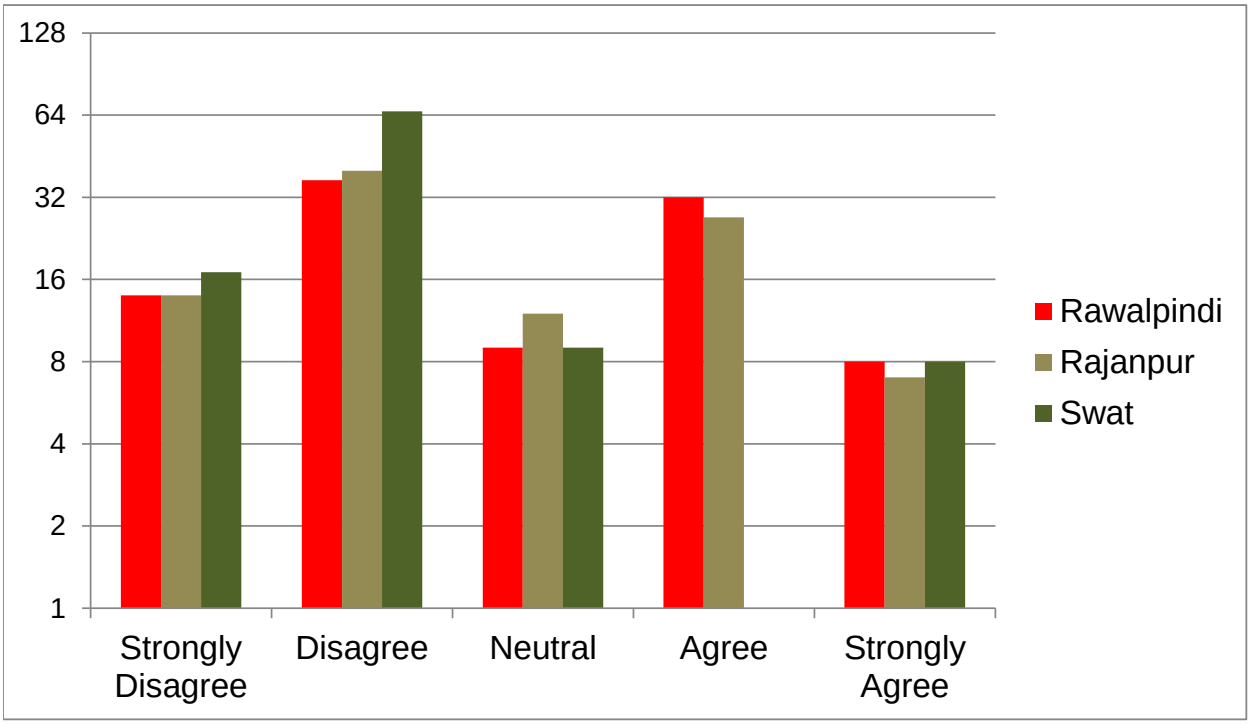


Figure 6.13: Data plotted for corresponding Q13.

Chapter 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

7.1.1 Conclusion – 1: Communities, whether urban or rural, disaster hit or not have endorsed that radio though not faster (56%) is a cheaper medium (62%) that updates (59%) during disasters with community participation (55%) as its hallmark but cannot provide hope (63%) to the communities.

7.1.2 Conclusion – 2: Rural or disaster struck communities that have less exposure to media agree that community radio is a trusted medium (55%) that can play a significant role in information sharing (54%), hazard mitigation (53%), community resilience (61%) and DRR education (62%).

7.1.3 Conclusion – 3: Urban community; not hit by any major disaster, having better exposure to electronic/ print media but not having any interest in community radios conclude that radios are neither trust worthy (50%) or reliable (53%) nor widely used (51%) and hence cannot prepare resilient communities (52%).

This research study provides deep insight into the basic concepts and working of Community Broadcast in the realm of Disaster Management. Pakistani community lives in a state of chaos and confusion with no clear direction. There is a need for realization at national level for community integration and cohesion at grass root level for their self enhancement and advancement. Community broadcast provides an excellent opportunity for addressing issues at community level through active participation by the community members. The gaps/ loopholes in existing policies have been clearly highlighted in this study considering the views of community members through semi-structured interviews. Moreover, this research study has identified and recognized the need of community broadcast in Pakistan.

Moreover, it has been revealed in research study that sooner the communities start analyzing their risks within the communities and start mitigating them, quicker would be the resilient communities. Pakistan is a poor country and cannot spend millions of dollars on preparedness and mitigation therefore there is a need for community cohesion through community broadcast. Community radios can provide an excellent opportunity to community members for self-preparedness and mitigation in complete cycle of disaster management. The technology being used in FM based community radios is cheaper and simpler and can be easily sustained by even poorer communities. The community broadcast will also help in bridging gaps between global DRR and local DRR. This bridging of gap will also help in meeting priority actions of Sandai Framework for action and achieving sustainable goals.

Furthermore these DRR radio can have direct interaction with the intended community through direct or indirect feedbacks. Once the radio transmission is aired in the community language then it has everlasting effects. Targeted community will also be able to enjoy infotainment in their native language. Feedback is the lifeline of any community radio. It requires a constant contact with the community through different forms of feedbacks i-e their participation in programs, through dialogue, toll free numbers and text messaging. Unless the community participates actively, the whole system of community radio will go in vain.

Societies can be educated through community radio about the probable hazard risks they are vulnerable to. Their strengths and vulnerabilities can be identified so that coping capacities are enhance to avoid hazards. This hazard identification will not be limited to natural hazards i-e earthquakes, floods; rather communities will be educated as how to use safe drinking water, what are the resources of safe drinking water in that society, etc.

Public can be made aware of the different types of disasters and their short and long-term measures. This encompasses all elements in a Disaster Management Cycle. Since majority of the women are available at houses therefore they will be made aware as how to react under earthquake, storms or flood situations. Communities will also be educated about the intended threats of terrorists groups and their implications. Societies can also be educated for not renting out their houses to people having connections with terrorists groups. Communities can also be made aware of how to make their family evacuation plans when a disaster strikes a particular community.

7.2 Recommendations

Following are the recommendations on the basis of this study:-

7.2.1. Recommendation-1

a. NDMA to establish an FM based DRM community radio channel on 105.0 MHz throughout Pakistan with following contours:-

   i. Acquire complete bandwidth of VHF frequency from PTA i-e 105.0 MHz - 105.9 MHz for NDMA

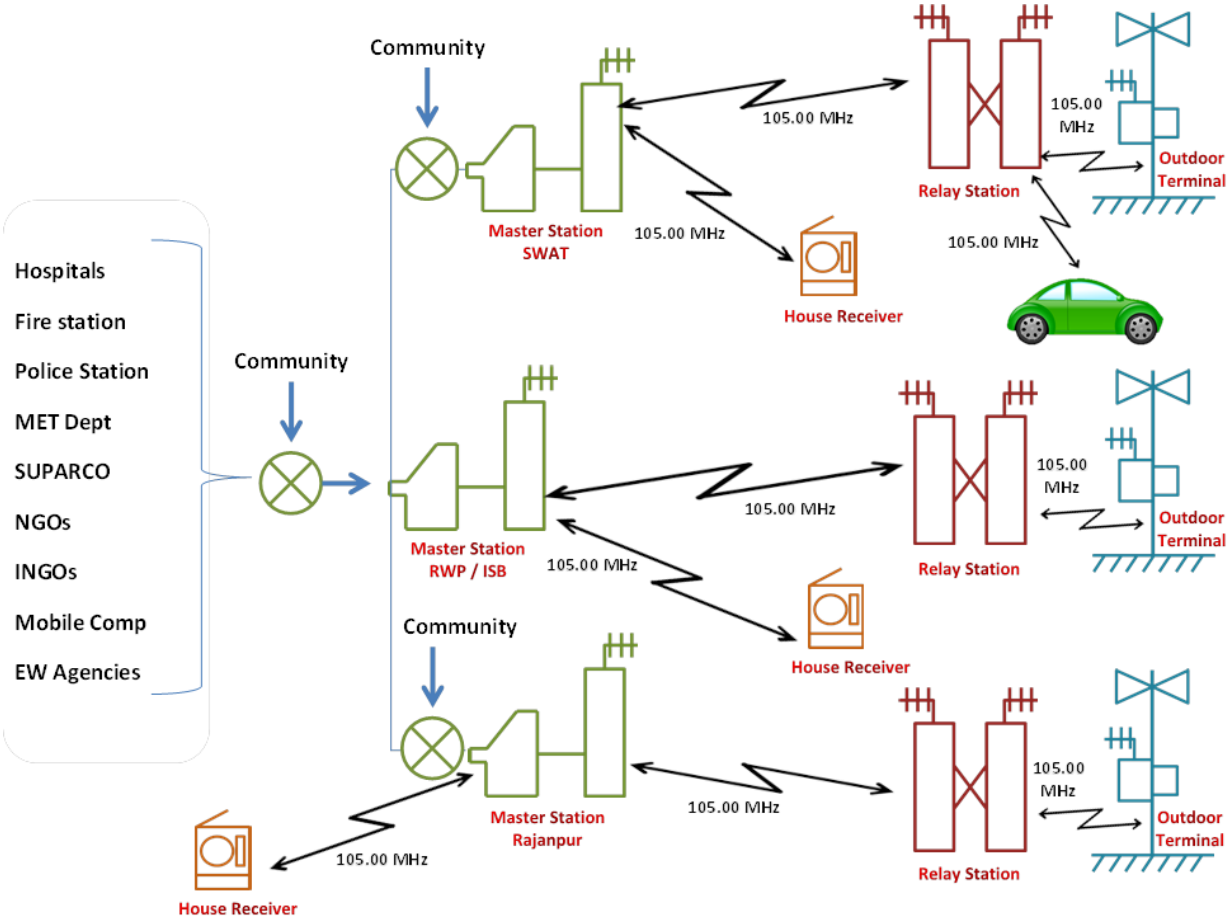
   ii. Air broadcast general information of DRR on 105.0 MHz for Rawalpindi/ Islamabad, Swat and Rajanpur initially as a pilot project named “Voice of NDMA”.

   iii. Participation of local communities in their local languages to build trust and hope to minimize damages against disasters and prepare resilient communities.

   iv. Integrate all stake holders for timely feedback information about impending hazards in the community and their DRR education.

b. Approval of by-laws for including 5 minutes air time out of every 60 minutes for DRR information in every licensed FM based commercial/ campus channels.

MODEL – 1



Model 7.1 Suggested Model as Voice of NDMA.

7.2.2. Recommendation-2

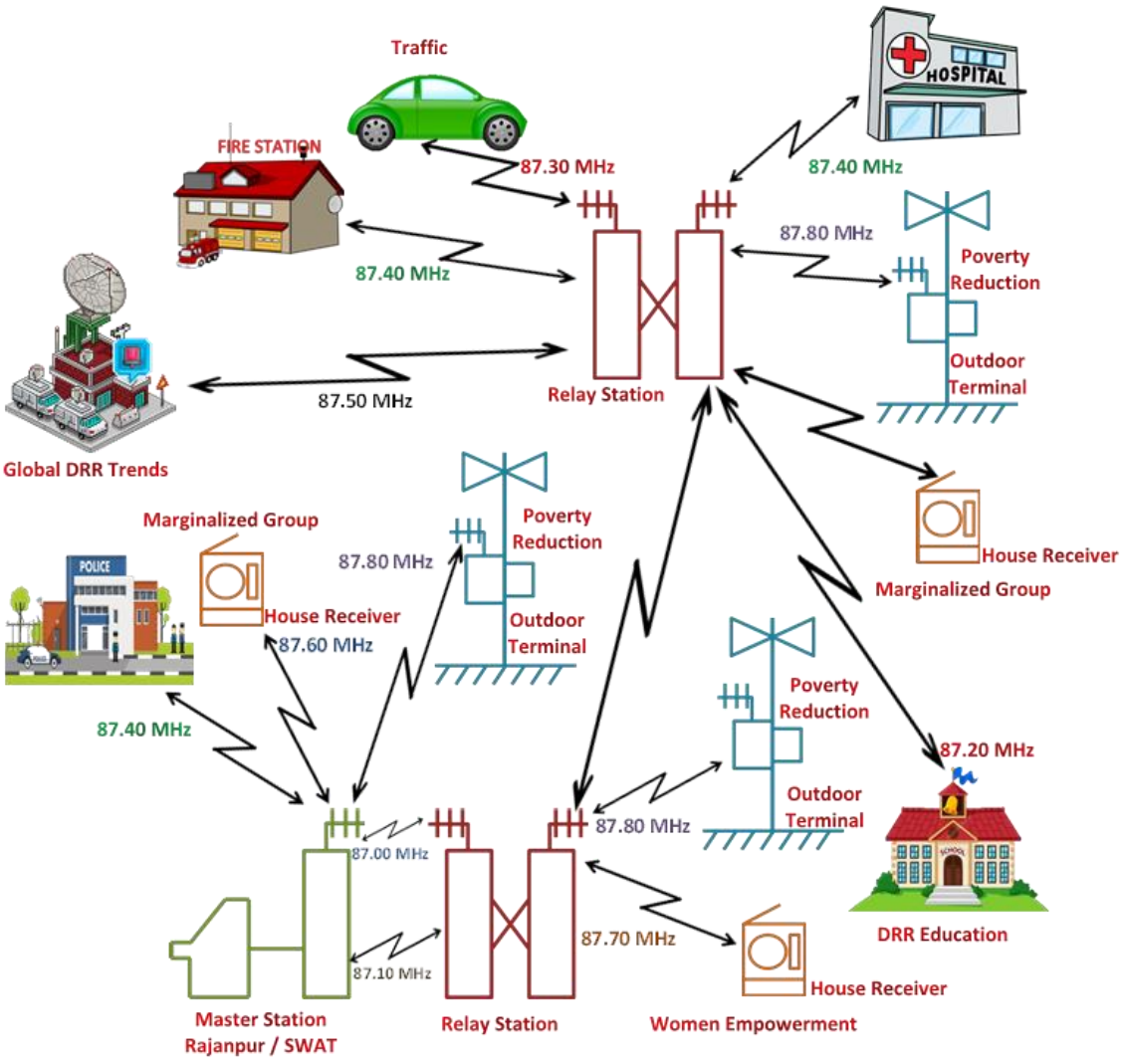
a. NDMA to establish a number of FM based DRM community radio stations on 105.0-105.9 MHz in Swat and Rajanpur with following enhanced features:-

Frequency (MHz)	DRR Channel
105.00	Voice of NDMA
105.10	Local Community Risk Analysis
105.20	DRR Education
105.30	Trafficability
105.40	Hospital/Police/Fire Station
105.50	Global DRR Trends
105.60	Marginalized Group
105.70	Women Empowerment
105.80	Poverty Reduction
105.90	Rehab

b. Phase wise expansion of FM based DRR channels throughout Pakistan after successful feedback of Swat/ Rajanpur communities after one year through social media apps.

c. The next step for further research study could be conducted to evaluate use of internet radios for further expansion of community radio broadcast all over Pakistan.

MODEL-2



Model 7.2 Model of Multiple Community Radio Stations

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