



Indigenous Strategies to Cope with Rod Kohi: A Case Study of Rural Dera Ghazi Khan

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ABSTRACT

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Climatic change in recent decades has significantly increased the frequency and intensity of water-related disasters in Pakistan. Erratic monsoon rains, once relatively predictable, have become highly uncertain, often triggering devastating flash floods in Southern Punjab. The rural flood plains of District Dera Ghazi Khan are particularly vulnerable. Communities living in these areas, whose livelihoods are predominantly agrarian, have developed indigenous strategies to minimize losses and sustain agricultural subsistence. This study explores the precautionary measures and coping mechanisms employed by local agrarian communities, drawing on ethnographic fieldwork conducted for PhD research in Anthropology. Data collection included participant observation and 20 in-depth interviews with flood-affected farmers across villages in Dera Ghazi Khan. The findings reveal a range of indigenous preventive measures such as altered cropping patterns, construction of private dykes (Awami bands), elevated housing structures (Thalla), and collective labor systems (Wingar). Coping strategies include reliance on Baradari networks, inter-caste marital alliances, temporary migration, food and fodder storage, and the construction of Charhawa or Machan to safeguard valuables. The research concludes that these locally developed systems not only mitigate flood impacts but also strengthen social cohesion, demonstrating how indigenous knowledge continues to play a critical role in climate resilience.

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1.0 Introduction

Environment and humankind have close relationships with each other. Humankind faces resistance from nature in the form of disasters such as earthquakes, volcanic eruptions, and climate change resulting from excessive exploitation of natural resources (Rana, Lodhi, Zia, Jamshed, & Nawaz, 2022). Scholars have long debated the definition of disaster. Quarantelli (1998) questioned its conceptual clarity, while Dombrowsky (2005) dissected the term, explaining disaster as an empirical falsification of human action and as proof of the correctness of human insight into both nature and culture. According to him, disasters do not cause effects; rather, they are themselves effects of underlying vulnerabilities. The lack of problem-solving capacity is, in itself, disaster.

In Pakistan, weak institutional structures exacerbate vulnerability to flooding, as demonstrated by the Rod Kohi inundation of 2022 (Rafferty & Metych, 2025; UNICEF, 2025). If local populations respond actively, such events remain manageable, but if not, they evolve into disasters. Sociologists argue that disasters are societal phenomena, acting as catalysts that disrupt social coherence and cultural protections (Kreps, 2005; Dombrowsky, 2005). From an anthropological perspective, disasters also shape culture. As Bankoff (2003) illustrates in the Philippines, natural hazards such as floods, earthquakes, and typhoons actively influence cultural formation. Cultures develop natural, indigenous capacities to cope with disasters (Johnston & Selby, 1978). This study, therefore, explores the natural capacity of the natives of Sanghar and Notak to cope with heavy flooding through locally evolved strategies.

2.0 Literature Review

Flooding remains one of the most destructive natural disasters, with varying intensity depending on geography (Tariq & de Geisen, 2012). Causes include heavy monsoon rains, melting snow, and unusual precipitation patterns. Climate change, largely driven by greenhouse gas emissions such as CO₂, intensifies these events (Gillespie, 2011; Berliner, 2003; Ayers & Forsyth, 2009; Pachauri et al., 2015; Aslam et al., 2020). While global science highlights these trends, communities also possess indigenous knowledge that shapes their understanding and adaptive responses (Ghazali et al., 2021).

Pakistan has a long history of devastating floods, including those of 1950, 1956, 1957, 1973, 1978, 1988, 1992, and 2010 (Hashmi et al., 2012; Ahasan & Khan, 2013; Ali et al., 2016; Shah et al., 2022; Waseem & Rana, 2023). The 2010 flood, among the most hazardous, inundated large areas of the Indus Basin due to excessive monsoon rainfall, with pluvial flooding especially dangerous in densely populated regions (Tariq & de Geisen, 2012). Flash floods in South Punjab—including Multan, Bahawalpur, Rahim Yar Khan, and Dera Ghazi Khan—are recurrent hazards caused by heavy rainfall and torrents from the Suleiman Range (Munir & Iqbal, 2016). Locally known as *Rod Kohi*, these flash floods occur rapidly when intense rainfall meets either saturated or poorly absorbent soils (Archer, Parkin, & Fowler, 2017; Javadinejad, 2022; UNICEF, 2025; Rafferty & Metych, 2025).

In 2022, another pluvial flood struck Pakistan, submerging the villages of Notak and Sanghar and devastating cotton and rice crops (Government of Pakistan, 2022; United Nations, 2022). Despite the presence of the National Disaster Management Authority (NDMA) and

Provincial Disaster Management Authorities (PDMA), institutional response remains insufficient. As a result, rural communities rely on self-devised preventive and coping mechanisms. This study examines how the people of Sanghar and Notak continue to develop strategies in the absence of effective state intervention.

3.0 Methodology

This qualitative research was designed to explore the natural capacity of rural communities in coping with and mitigating the impacts of flash floods. Grounded in anthropological inquiry, the study employed a purposive sampling strategy (Bernard, 2006; Tongco, 2007; Devers & Frankel, 2000) to ensure the selection of respondents with relevant experiences. A total of 20 male participants were interviewed, as cultural and gender sensitivities in the study area restricted access to female respondents. The selected participants represented different age groups, allowing for a diversity of perspectives on indigenous strategies.

Data collection methods included semi-structured interviews and participant observation. Semi-structured interviews provided flexibility to probe into respondents lived experiences, while maintaining consistency across core questions. This approach enabled the researcher to gather rich qualitative data on the locally adopted preventive and coping measures practiced during and after the 2022 flood. Participant observation further complemented the interviews, offering insights into everyday practices, communal responses, and cultural norms embedded within flood management strategies.

Through this combination of methods, the study documents the indigenous knowledge and adaptive practices that enable agrarian communities in Dera Ghazi Khan to enhance resilience and sustain their livelihoods in the face of recurring flash floods.

4.0 Findings and Results

Native Preventive and Coping Mechanisms:

Natives of Sanghar had developed their own ways to prevent and cope with floods. These preventive measures and coping strategies are shaped due to a long process of confronting floods. These preventive measures and coping strategies have developed social coherence among the natives. This vulnerability to floods improves the natural capacity of the natives.

Preventive Measures:

I have talked about the preventive measures taken by the local people according to the flood season. During the research, it was observed natives had their own cultivation patterns of crops, dyke systems, and housing structures to prevent floods.

Basti Baig is situated in the area of Notak that's why It is always vulnerable to floods. The government does not pay attention to this area due to its location. It is located on the border of Koh-e- Sulaiman. The prime focus of the government always remains the banks of the river rather than Rod Kohi Local governmental officials come to rescue the locals when whole village is inundated.

This situation helped the local people to develop their own cultivation patterns. During flood season their major crops were cotton, vegetables, and crop of Rice. These crops had

always been affected by flooding. They had to face a great loss in every season. Local people had set a new trend of cropping to minimize the loss. They do cultivate rice and *Janter*¹ (جھنجر) for this purpose. Economically these crops do not meet their needs. Respondents said that they cultivate two crops of rice and wheat in a year. *Janter* is a grass that is cultivated to cater to the need of livestock. These crops do not add much to their income.

It was also observed that people were more conscious about flooding, which is why they were cultivating the rice. I also observed that local people cultivate *Savi moun*² because they harvest it in sixty to seventy days. Local people are accepting the change and they are converting themselves according to the modern age. People need four to five crops in a year.

According to my respondents and observation, the major crops of the area were *Kanrak*³, *Kappah*⁴, *Chawal*⁵, and *Janter*.⁶ *These are cash crops that's why most of the farmers cultivate these crops.* In vegetables, they cultivate *Tinda*⁷, *Kaddu*⁸, *Karela*⁹, *Turi*¹⁰, *Mooli*¹¹, *Gajjr*¹², *Ghungalu*¹³, *Tamater*¹⁴, *Bhindi*¹⁵, *Gohbi*.¹⁶ The small landholders always prefer to cultivate these above-mentioned vegetables to meet their daily needs. The land of the villages of Mangrotha near Sanghar and Basti Ahmdani, Kacha Kakori near Notak is also suitable for watermelon and Melon. Now they are changing their cropping pattern to cater the economic losses. Now they prefer the cultivation of the *Sawi Mungi*. This option emerged to cater to the loss occur during the flood.

A respondent said,

"Cultivation pattern is important for us to prevent floods. A decade ago, we used to cultivate only wheat in this area. During that era, there were no small-scale landowners in the area. These lands were under the control of Jageerdar¹⁷ and Zamindar¹⁸. The cultivation of wheat was extensive. It used to be helpful for the income generation for local farmers. mitigation of the impacts of floods. Big landholders have sold their lands to those people who were their Muzerey¹⁹. The population increased

¹ A small tree of the acacia tribe. Woods of little value and pods are eaten by sheep and goats.

² A type of Pulse

³ Wheat

⁴ Cotton

⁵ Rice

⁶ Grass

⁷ Apple Gourd, Round gourd

⁸ Bottle gourd

⁹ Balsam Pear

¹⁰ A kind of Cucumber, *Luffa acutangula*

¹¹ Radish

¹² Carrot

¹³ Turnip

¹⁴ Tomato

¹⁵ Lady Finger

¹⁶ Cauli Flower

¹⁷ Big Land owners, the owner of a territory

¹⁸ A size able land owner

¹⁹ Tenant of the Jageerdar

with the passage of time. Now, this one crop does not meet their needs. The cropping pattern has changed and people cultivate four to five crops annually. Now we cultivate the crop of cotton at the mercy of Allah. If flood did not occur, then we remain grateful to Allah and if it comes then we have to bear the loss.”

Jageerdar and Zamindars had sold their inherited land to small landholders. Now a big chunk of small landholders emerged. These small landholders cannot afford one or two cash crops in a year. These two or one crops (Wheat and Rice) do not meet their annual needs. That's why they prefer vegetables and other crops like *Sawi Mungi* and it is a kind of strategy to overcome the losses during flood season. Besides this, they built their own private dikes to protect their crops from floods.

It was observed there were two types of bands/dykes that existed in the locale. One of them was government bands and dykes and the other was Awami Band²⁰ / private bands. These bands and dikes were built as a preventive measure in response to floods. But in my research locale, there were no government bands besides these Awami bands had existed. These Awami bands had existed at the tributaries of *Sanghar* and *Notak*.

These Awami bands were built by natives through their own resources. In these resources, some people contribute through cash, some provide their own Machinery such as tractors and Trolis, some provide labor and some provide food to the laborers. Everyone contributes to this communal activity according to his affordability and status. This whole communal activity is known as *Wingar*. The whole social structure of society stands on this concept. Through *Wingar*, Natives can cover many problems. Those who need *Wingar*, just provide food and in return they will also give *wingar* to other community members.

During an in-depth interview, I came to know that when a flood occurs; Natives of the villages gather at the tributaries of *Notak* and *Sanghar* to protect the bands. These tributaries are situated at the boundaries of the villages of *Balqani*, *Kocha Kakari*, *Sabzani*, *Haderani*, *Jangvani* and *Shaden Lund*. People protect and help each other according to their capacity. When the level of water increases and is beyond their control then they move into their homes.

During fieldwork, I came to know that their **housing structure** also plays a vital role to protect and prevent flood water.

A respondent said,

“We make Thallay²¹ and the height of the Thalla is five to Eight feet from the river level. The surrounding area of the Thalla is one kanal²² to a Begha²³. We built a Chaveri²⁴ on the outer side of the house and the width of the Chaveri is 1.5 feet. In the middle of it, we make the rooms. These rooms are built in a row and the direction of the rooms is in the north. It consists of residential rooms, store rooms, Bhanran²⁵

²⁰ Public Dyke

²¹ High Plat form

²² A square measure of land equal to a half rood

²³ Half Acre

²⁴ A wall made by the clay around the house

²⁵ Farm of Animals

(وہڑا), *Vehra*²⁶ (وہڑا), (*A courtyard in front of the house, an enclosure containing many houses*) bathrooms and toilets. Our houses are in the flood zone and we always remain at risk of flooding. So, we make *Thalla* and built our houses on it to protect ourselves from the routine flooding.”

The local housing structure also helps the natives to prevent flooding to cause damage to property. It was observed that local people made their houses on a higher platform and the height of the platform was five to seven feet. Its height varies from place to place in the village. They made *Kacchy* houses²⁷ and the rooms were in a row. They do not plaster their houses. The roofs were made by the T.R. and girder. In the village, some houses were also *Pakky*²⁸ and roofs were lentered. The wealthiest of the area had *Pakky* houses, but most of the houses were *Kacchy*. The direction of the houses was to north. Every house has consisted of six to seven rooms and some houses also consisted of two to three rooms.

During interviews, many respondents told that *Thalla* has an important role to protect their houses, livestock, and cereals. Every family has its own *Thalla* and they make it in their own land and in the middle of their agricultural land. The houses were situated far from each other. Relatives construct houses near to their relatives. Often, they made *Kacchy* houses because of severe flooding they use the material of their house to make the *Charhawa*²⁹ and *Machan*³⁰. This was a local technique to face the flooding and mitigate its effects. They were using this technique as part of their culture. They made their new houses while considering the floods.

Coping Mechanisms

Before the occurrence of the flood event, they migrate to higher plate forms or move to safe places. Such as they move to D.G. Khan, Shaden Lund, Taunsa Sharif. They moved in rented houses in these cities. Some of them stayed with their relatives or with the families of their friends but most of the people take shelter in camps run by the local government. Some of them prefer to stay at their homes. Here a question is arising why do some prefer to stay with their relatives or at their homes? I came to know; security conditions were not feasible for the people that's why they prefer to stay in their homes. Some incidents of looting and kidnapping was happened during the 2010 floods. Some of the relief workers had provided intoxicated food to the flood victims in relief camps. Those so-called relief workers had looted them, kidnapped the young girls, and raped them. So, people were conscious of the security conditions in the flood relief camps. One of the respondents told,

“Now we do not prefer to stay in the camps because of the Purdah issues. In the 2014 flood, we stayed in the camps because our land was besieged by the flood water. We decide to stay in the camp, but the experience of the camp was rancorous for me and my family. The flood relief camps were situated on the eastern side of the villages.

²⁶ A court yard in front of house and an enclosure containing many houses.

²⁷ Made by Clay or not cemented houses.

²⁸ Made by baked Bricks and Cemented houses

²⁹ A building which natives build during floods and place their luggage at that structure.

³⁰ It is an alternative to *Charhawa* and it use for same purpose.

People from the city came there and passed abusive remarks about our critical condition. They did also harass our women and we felt insecure during our whole stay in the relief camp.”

Security and purdah issues forced them to stay at their inundated homes and live with relatives rather than to move in shelter camps. Moving to the relatives means being dependent on the *Baradari*. **Baradari** is a whole social system that defines social values and norms. The *Baradari* system is developed due to intra and inter-caste marriages. This *baradari* system helps the natives to mitigate the impacts of floods. During my stay in the field, this system helps me to understand the social system of the villages. All social activities were connected with this social system.

Before discussing the marriage system, I would like to discuss the Baradaries living in my research area.

One of the respondents from Notak shared his views about the local baradaries.

“We have bradary system in the villages of Basti Ahmdani, basti hadrani, Basti jangvani, Kocha Kakari, Shaden Lund. There are Hadrani baradari, Jumvani Baradary, Sehani Baradary, Lund Baradary Jangvani Baradari and Qambarani Baradary living in this area. These are the sub baradaries of Baloch tribes”

Further my respondent told me about the marriage pattern in the local community based on the caste system.

“Mostly we have intra-caste marriages because these are family members who help each other during emergencies. But in our village, we have inter-caste marriages and the ties made through these marriages have been proved very strong than that of the ties made through intra-caste marriages.”

During an interview, I asked my respondent: why are local *baradaries* moving to inter-caste marriages? I came to know that inter-caste marriages help them to mitigate the effects of floods, droughts, and other social problems. Further, my respondents told me, that some of them had *Shadi Baradari*³¹. Inter-caste marriages are not only marriages between two families but these marriages create a bond between two castes. Inter-caste marriages work as a tool to develop bilateral relations between two castes. Through these bilateral relations, they help each other in floods and droughts. They support each other unconditionally.

One of the respondents said that during the 2022 flood, many people from the Mouza Gajani migrated to the mouza Rehman and they stayed there with their relatives. Monsoon season had played a major role to provide opportunities in the development of inter-caste marriages. Intra-caste marriages were already prevailing in society. Through intra-caste marriages, they had limited options and resources to mitigate and cope with the floods. Through inter-caste marriages the probability of the resources increases. In my view, this whole system of *Shadi Baradari* developed due to the threat of floods and droughts.

³¹ In Shadi Baradari local people participate in rituals of marriages and funerals. This thing gives the surety that you are part of the community. This thing creates social bondage among the community. If one does not be the part of Shadi Baradari other will boycott him socially and in future, they will not participate in each other's marriages and funerals. Shadi baradari defines the social relations and the marriage system of the mouza Shahpur.

Under the concept of *Natural capacity*, I further explore the local coping activities like Storage of dry food, Storage of Fodder, backlogging of firewood, storage of drinking water, and construction of *Charhawa* or *Machan*.

Natives of Sanghar and Notak, store dry food for emergencies like floods and droughts. Local people dry the meat, vegetables, and corn. Besides these items, they store pulses for emergency situations. Dry meat is comprised of mutton and beef for the purpose of storage. As far as the vegetables are concerned, they do dry *Ghunglu*, *Gajjr*, *Mooli*, and *Ghubi* along with green vegetables such as *Saag*³², *Palak*³³, and *Metheri*³⁴. *Pind*³⁵ is the most common and easily available fruit in the area and people dry it for storage. In Pulses, they store lentils, *Dal Masoor*, *Urad Dal*, *Rawan*, *dry Peas*, and *Dal Channa*. They also make *Achar*³⁶ and it is widely used during floods and in other emergency situations.

One of the respondents shared his views about the storage of dry food he said,
“*We dry vegetables and meat as it is our tradition. We dry these things to use in the coming season. In vegetables, we dry Mooli, Ghunglu, Gajjr, and Ghubi and in green leafy vegetables, we dry the Saag, Palak, Metheri. We also store Vssal*³⁷ *for daily use. Onion is part of our meal. We lunch with onion every day. We cut the onions into pieces and then apply salt on them and get them washed with water. Then we serve it with Makkhan*³⁸*, Nibbo*³⁹ *(Lemon), and Achar is also part of the meal.*”

Many times, during fieldwork natives, served me the meal with *Makkhan*, *Vssal*, *Nibbo*, *Pickle*, and *Lasi*⁴⁰. During the informal discussions; I also raised the question about local food culture in routine life and during emergency situations. I came to know that local people had stored different dry vegetables which are mentioned above. They store *Gurr*⁴¹ when a flood emergency is announced and implemented by the government.

While discussing the trends of food storage and its utilization, I got to know that the trend of the storage of different dry food items is changing. Respondents told that now people only store the pulses for emergency use. They said that they have become fainéant to store dry food for an emergency situation because it is a time-consuming task. The women used to own a responsibility to store dry food for emergency use. At present, women have many other tasks to do and they do not practice like their elder generation. Everything is now available in the market and cash money has brought a revolutionary change in the area. They simply purchase everything from the market.

³² Green vegetable, Pot Herbs

³³ Spinach

³⁴ A fodder plant, *trigonella fcenum*

³⁵ Dates

³⁶ Pickles

³⁷ Onion

³⁸ Butter

³⁹ Lemon

⁴⁰ Buttermilk

⁴¹ Brown sugar

Local people used plastic jars for the purpose of food storage. The culture of dry food storage in clay pots has vanished with the passage of time. Now plastic jars have replaced clay pots. They do not use clay pots because there is the threat of being broken during moving from one place to other during an emergency situation or might get broken during migration from one place to other. Plastic Jars are safe than clay pots that's why now they prefer Plastic Jars.

One of the respondents shared his views about the storing pots and said,

"A decade ago, we used to have clay pots. Even we used to cook our meals in clay pots and now we have seen a drastic change. We have completely shifted from clay pots to steel-made pots. Now we use the steel-made pots for cooking our meals."

It was a great practice, which has now vanished due to the capitalist market and availability of food products in markets. During floods, it is also important to feed the livestock. Fodder is a necessary food item to feed livestock. Stored dry fodder is provided to livestock round the year, but it caters to the basic need of hunger of livestock during flood season. I observed that local people had stored the fodder in four types of places and these are known as *pallay*⁴². Firstly, it is stored on the ground where the local people thrash their wheat, secondly, it is stored in *Kacchy Pallay*⁴³, thirdly, *Pakkay Pallay*,⁴⁴ and fourthly in *Kany Wally Pally*⁴⁵. All these types of *Pallay* are used for storage of the Fodder.

During flood time, people also need fuel for fire and fuel is a necessary item. Generally, in flood-affected areas, people do not have much firewood and they purchase the firewood from the market. Most of them cut wood from the trees. In the researched area, they do not have the facility of gas and they use wood as a fuel.

A respondent shared his views about the backlogging of the fuel. He says,

*"We store the fuel before the flood. When a flood occurs then it is not possible for us to purchase or gather the wood for fuel. We store the fuel for a whole season. We tie the wood in bundles and gather these tied bundles at certain places. Then we tie these bundles with *Kmund*⁴⁶. It is a big rope which is made of *Kaahan*⁴⁷ and *Kabal*⁴⁸. This is a very strong rope and we knot the rope with a wooden nail. We tie the wooden bundles from two sides. Often, we backlog the firewood at the *Thalla* because it is a safe place. Why we do this because during a flood there is a need for firewood to cook the food and light the fire for heat. When flood inundated the whole area then temperature decreases, and it gets cold."*

⁴² Storage place for bran, single *Palla* and plural *Pallay*

⁴³ Storage place made by the clay

⁴⁴ Storage place made by the baked bricks.

⁴⁵ Storage place made by the Reed. This type of storage room is made of Reed. It was made in cylindrical shape and its surrounded area was 10 by 10 foot. Natives store the fodder in this *Palla* for the emergency situation. These sorts of *Pally* were mostly made at the *Thalla* to ensure the safety of the fodder from being theft.

⁴⁶ A rope by which a date picker climbs the palm tree.

⁴⁷ Thatch Grass.

⁴⁸ Fiber round the date palm and from this fiber a rope is made.

I had observed that natives backlog the firewood at their *Thalla*. In some places, people did not have to backlog the wood, but they place the wood in their homes, and homes were made at a high plate form. They store the firewood for daily use and especially during the flood. During the flood, they are needed to cook the meal, and they are required to heat. They spend most of their time under the open sky in this duration. So, they are in need of firewood to keep them warm.

Further, People made *Charhawa* when floods occur. Do not confuse yourself with the word *Charhawa*. The word *Charhawa* in the Saraiki language has two meanings. First, it is used in the meaning of *Mannat*⁴⁹ and second *Charhawa* is a physical structure that stands on four pillars and has a roof. People put their luggage on top of it. Generally, its height is a maximum of 7 feet. Its height varies from place to place because some places are higher than flood level and some places are lower than the flood level. The practice of making it prevails throughout the whole village. They make *charhawy* because they want to secure their luggage. How they made the *Charhawa*? I observed that most of the people had Kacchy houses. On the occasion of a flood, they break a room and build it with the material of that room. They had used baked bricks, T.R. and *Guarder*⁵⁰. They had built it on a temporary basis and every time they practice it when a flood occurs.

It was also observed that non-government organizations i.e., Doaba foundation and Moujiz foundation were also making cemented *Charhaway* on a permanent basis to mitigate the losses of a flood. *Charhaway* constructed by these NGOs had the capacity to serve the luggage and members of four to six households. This practice of NGOs shows that they are following the indigenous ways. They built these on a communal base. Natives were making at the individual level but practice shows that it does prevail in the whole are.

5.0 Discussion and Conclusion

Nature and cultures are connected with each other because nature shapes culture. Excessive exploitation of nature causes disasters. Disasters occur due to human actions and according to Dombrowsky (2005), lack of capacity to prevent a particular event is a disaster. Weak structures always cause problems, and the same case is with Pakistan. It has a weak structure to control the water that's why the Notak and Sanghar inundated the different areas of the D.G. Khan and Taunsa Sahreef due to the excessive monsoon rains in 2022. Disasters always develop a culture of social coherence and protection. Natural hazards: earthquakes, volcanic eruptions, typhoons, tsunamis, floods, and droughts are the agents of cultural formation. Disasters work as a social catalyst to develop a natural capacity to cope with them.

This study explores the natural capacity of the natives of Rural D.G. Khan. The population is situated in the riverine area of *Sanghar* and *Notak*. Routine flooding helps the natives of the villages to develop particular preventive and coping strategies. Those preventive measures are cultivation patterns of different crops, dyke systems, and housing structures. Along with there are some coping strategies: *Shadi Bradari*, *Bradary System*, Construction of *Thalla*, *Charawa* or

⁴⁹ Taking on oneself another's debt

⁵⁰ Girder

Machan, Back Logging of the wood, storage of dry food, Storage of Fodder and drinking water.

Indigenous coping strategies in rural D.G. Khan may be connected with socio cultural network among Baradari members. Inter-baradari relations and intra-baradari kin groups cooperative mechanism works as key role to boast coping steps against devastating water of *Rod kahi* in the villages of this piece of research study. *Rod kahi* water does not hit the entire areas occupied by the various Baradaris, so some of the Baradaris have already been settled in a safe place, those Baradari members occasionally cooperate with each other particularly in the monsoon season. Such sort of cooperation and coping strategies starts with early warning phase of *Rod kahi* localities. During this critical phase, the people who reside in the flood hit areas bring their domestically useable luggage along with animals to the safe areas where their family members or Baradari members host for a few months. Coping is impossible without cooperation of inter or intra Baradari and family members in rural settings. In the most difficult circumstances, some people sale their animals and land as well as to cope with the situations.

Abdul Samad Akbar: Problem Identification and Theoretical Framework

Anwaar Mohyuddin: Data Analysis, Supervision and Drafting

Rashida Aziz: Assistance, Literature Review

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