Exploring land governance in post-disaster: a case of informal settlement

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SUMMARY

Land is the fundamental element for shelter, protection, livelihood and early recovery from disasters such as earthquakes, floods and landslides. The effects of these disasters have direct consequences for the social, economic, legal and cultural life of the people surviving these disasters. These consequences can lead to human, structural and financial losses. The land issues are pertinent in terms of human vulnerability because land policies, and laws in access and allocation of land determine vulnerability of human beings during natural hazards. In this context, land governance – referred to as policies, rules, processes in access and allocation of land- plays significant role on the pre-disaster as well as post-disaster settings.

The informal settlement is often considered as the outcome of weak land governance and it becomes more pertinent in the post-disaster settings. Basically, the proliferation of informal settlement as well as increased risk of vulnerability of existing informal settlements is often seen in the post-disaster context. Providing adequate shelter (after disaster) remains one of the intractable problems in international humanitarian response, particularly, in urban settings with tenure complexity such as multiple occupancy, informal tenure, and tenancy. However, these also create an opportunity to incorporate informal settlement in formal settings in the context of "Build Back Better". Within this context, the focus of this paper is on analyzing the land governance in informal settlements during reconstruction phase of post-disaster periods. The method applied is based upon the desk research reviewing various literatures in the cases of Haiti earthquake 2010 and Gujrat earth quake 2001 in relation to land issues in post-disaster periods particularly in informal settlements. The comparative analysis of case studies shows that land governance plays a vital role in "Building Back Better" which basically indicates towards reducing vulnerability in future disaster. The paper concludes with key lessons learnt in the context of land governance and "Building Back Better".

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1. INTRODUCTION

Land issues are always relevant to the effectiveness of the humanitarian assistance to the disaster phases. In pre-disaster as well as post-disaster phases, land is a sensitive and contextual issue. Nevertheless, in the different phases of disaster i.e. preparedness, relief, recovery and reconstruction, land is a fundamental requirement. The scholarly literatures often indicate that that access to land, allocation of land and land tenure security is a critical factor while building resilience and reducing vulnerability in post-disaster settings (Charoenkalunyuta, 2011). Usamah (2013) has shown that there is an overlap of resilience and vulnerability in the community where the strong social facts such as social capital, social cohesion and social network exist. A community such as an informal settlement can have coping capacity with reduced vulnerability because of their social aspects. However, lack of legal access to land and tenure security plays a significant role in the social, economic and cultural resilience of the people in the post-disaster phase in the context of reducing vulnerabilities.

Land governance plays a vital role in the post-disaster humanitarian response to building resilience of vulnerable groups. Land governance is about determining and implementing sustainable land policies and establishing a strong relationship between people and land (Enemark *et al.*, 2009). It is about rules, process and structure through which decisions on access to land, land rights, land use and land development are made and implemented by reconciling the conflicting interests (Deininger, Augustinus et al. 2010). It is also about the power play on access to and use of land as reflected in the rules and regulations (Deininger *et al.*, 2010; Palmer *et al.*, 2009a).

Informal settlements are the outcome of weak land governance in access and allocation of land to the vulnerable or marginalized groups. When referring to informal settlements, various meanings and characteristics such as slums (Huchzermeyer and Karam, 2006), shanty towns (Lloyd, 1979), squatter settlements (Willis, 2009) come up. Slums are characterized by the lack of basic services and durable housing conditions, insufficient living spaces and sanitation, insecure tenure, poverty and exclusion (UN-HABITAT 2005). Shanty towns are characterized by low quality buildings made out of materials (such as corrugated irons, plastic, and cardboard), lack of proper utilities. Squatter settlements resemble the physical characteristic of slums and shanty towns but they lack legal land ownership documents. The lack of legal recognition of these settlements hinders the reconstruction phase after an earth quake disaster (Doberstein and Stager, 2013).

The "Building Back Better" concept is considered as a guide for the reconstruction phase of a post-disaster period. This concept is limited not only to the physical improvement of the infrastructure but it is equally applicable to the social, economic and cultural resilience as well. The disaster creates opportunities to reconstruct the cities and various international

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donors are active to support the reconstruction. However, as highlighted in (Fitzpatrick, 2007), weak land governance hinders the alleviation of the aftermath effects in informal settlements blocking improvement of their shelters and livelihood. In contrast, Birkmann *et al.* (2010) have also mentioned that the aftermath of a disaster can create windows of opportunity to change either positively or negatively. Within this context it can be said that there is an opportunity in the aftermath of disaster to tackle the issues of tenure security in informal settlements.

In this study, land governance elements are used to understand the impacts of post earthquake disaster phases on the reconstruction of informal settlements with the aim to explore the land governance issues of informal settlements in post-disaster settings.

2. METHODOLOGY

We have adopted a case study approach to explore how land governance can have an impact in the reconstruction phase after a disaster. The cases of Gujrat Earthquake, which occurred in 2001, and the Haiti Earthquake, which occurred in 2010, are considered. The cases are selected based on earthquake hazards and countries having issues of informal settlement in the pre- and post-disaster settings. The land governance elements are extracted from Land Governance Assessment Framework (LGAF) (Deininger *et al.*, 2011) and the elements of building back better are extracted from "Build Back Better" framework conceptualized by Wilkinson and Mannakkara (2014). The units of analysis of the cases are the land governance elements. Figure 1 shows the methodological framework of this paper.
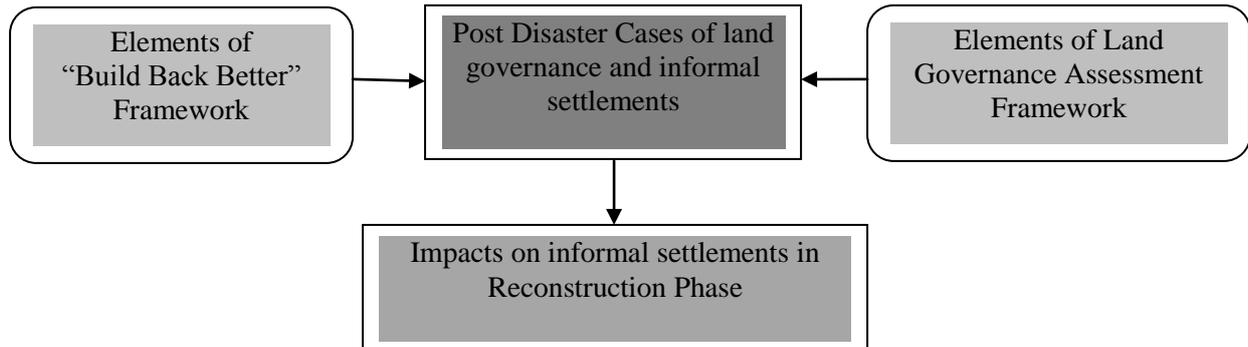

Fig. 1: Methodological Framework

The secondary sources are used to collect the data of the cases. "Google Scholars" was used to search the scholar articles, where as simple "Google Search" was used to search for the reports of multinational, bilateral organizations. The key words like "Haiti Earth Quake", "Gujrat Earth Quake" together with key-words like "informal settlement", "squatter settlement", and "post-disaster" and "land tenure" were applied in the search strategy. The types of documents used for the case studies are scholarly articles, reports by USAID, UN-Habitat, World Bank, IDMC Internal Displacement Monitoring Centre (IDMC). The following documents have been used for the case studies:

1. For the Haiti case study *(Bramante and Raju, 2013), (Blake, 2015), (Myers, 2014), (Sanderson et al., 2014), (Clermont et al., 2011), (Hooper, 2015), (Frederique, 2011)*; *(McCallin et al., 2015)*
2. For the Gujrat case study *(Fitzpatrick, 2007), (Mukherji, 2010), (Mukherji, 2015), (McCallin et al., 2015; UNISDR, 2010)* ; *(McCallin et al., 2015); (Jigyasu, 2002)*

3.   THEORETICAL BACKGROUND

In this section, the theoretical perspective of land governance in post-disaster settings and its impact on informal settlements are described. The contexts of the land governance framework and build back better (BBB) are given below.

3.1 Land Governance in the context of urban informal settlements

The main issue concerning land governance in informal settlements is about the provision of land rights and security, about curtailing the growth of informal settlements and about balancing conflicting interests of various actors in solving land issues for low-income housing (Palmer *et al.*, 2009b) . The various studies show that the weak land governance in regulating the land market for the low-income population is the driving force for the proliferation of informal settlements. Despite the failure of the land market, the lack of proper land use plans and the failure of appropriate implementation of land use plans are the causes for allowing settlements in vulnerable zones such as flood plains, fault lines, coastal zones etc. Further studies in the policy aspects have revealed that lack of clear policies related to land for informal settlement has generated a tolerant attitude of a government towards informal settlements. In the long run, the settlements exist for decades due to the powerful influences of the social networks and social capital of the informal settlers strengthens (Shrestha, 2013). As a result, the settlers get socially recognized although the legal legitimacy is weak (Shrestha *et al.*, 2014).

As regards the tenure security of informal settlements, the settlement tends to have de facto and perceived tenure security (Van Gelder, 2010). The de facto and perceived tenure security are basically developed when the physical upgrading of informal settlements takes place. Similarly, the increased social capital and social network enhance the perceived tenure security. In reality, the settlers or communities build their own social norms and rules in the settlement areas. Indeed the social norms and values play a vital role in the land governance of informal settlements (Shrestha *et al.*, 2014).

The elements of Land Governance Assessment Framework (LGAF) which was developed by the World Bank (Deininger *et al.*, 2011), provide the basis for evaluating the tenure security in informal settlements. The institutional and legal framework and land use plan are those elements that determine tenure security of informal settlements in a holistic manner. The indicators developed in LGAF on the institutional and legal dimension such as recognition of a continuum of rights, enforcement of rights, restriction of rights, clarity of institutional mandates can help to assess land governance in informal settlements.

3.2 The land governance of urban informal settlements in post-disaster

The studies related to the disasters revealed that the informal settlers are the vulnerable groups in the aftermath of a disaster. The land policies and laws that exist in pre-disaster settings play

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a vital role in providing shelter and reconstruction. The lack of policies to recognize land rights of informally occupied land affect humanitarian response. The humanitarian response of rebuilding the infrastructure and shelter on land without well-defined land rights will lead to conflict, delay and an increase in costs (USAID). The lack of policies to recognize a continuum of land rights (Augustinus, 2010) in order to provide land tenure security of disaster for the affected informal settlers results in their displacement. Allowing the involvement of the civil society groups to create an inventory of the socially recognized rights is important in effective reconstruction efforts and building long-term resilience for disaster affected informal settlers and communities.

The resilience of the community is defined as the coping capacity of disaster-affected people in terms of the environmental, social, economic and legal dimensions. The environmental resilience of the affected community can be achieved by timely land use restriction and implementation of land use zoning that prevents the informal settlers to settle back in the environmentally sensitive zone in the aftermath of a disaster. The social and economic dimension of resilience can be achieved by involvement of the community in resettlement projects in such a manner that it ensures their shelter needs and incorporates livelihood and sense of well-being. The legal dimension of resilience includes the mechanism to incorporate informal land tenure arrangement into secure land tenure for e.g. the use of technical provision of storing and preventing land occupancy records collected in community level reduces the disaster related risks and response in the wake of the disaster (Mitchell 2011).

3.3 Conceptualizing "Building Back Better" in land governance of informal settlements
The concept of "Building Back Better" (BBB) aims to improve recovery and reconstruction practices. The concept first emerged during the restoration after the Indian Ocean tsunami disaster (Wilkinson and Mannakkara, 2014). It is based on the norms that quick restoration without including risk reduction aspects that can further replicate and worsen the existing vulnerabilities. Kennedy et al. (2008) and Lyons (2009) pointed out that rebuilding in the aftermath of a disaster without mitigating measures replicates the same vulnerabilities that existed prior to the disaster. The examples include: the non-adherence to design and construction regulation for buildings and infrastructure, insufficient focus on the livelihood aspect and; neglecting vulnerable communities like informal settlements. Moreover, the authors, namely, Mitchell (1999), Lewis (2003) and Kijewski-Correa and Taflanidis (2012) indicate that the reconstruction and recovery period following a disaster poses an opportunity to address and rectify vulnerability issues in the communities. When BBB is linked with land governance in informal settlements it creates an opportunity of proactive interventions such as implementation of land use zoning, regeneration with application of land readjustment in the post-earthquake phase in Japan, in developing land for low cost housing to prevent new informal settlements. Similarly, it creates an opportunity for reactive intervention as well such as recognizing the informal settlement in the formal legal framework by in situ upgrading following the risk reduction norms. Land rights recognition based on the continuum of land rights (Augustinus, 2010) and adaptation of pro poor approach (Zevenbergen *et al.*, 2013) can contribute to do so.

Various guidelines aligning with the BBB concept are available and reflect land governance aspect. Several guidelines proposing the BBB concept in reconstruction operations have been developed. These guidelines at international level are *"Principle for Settlement and Shelter"* by United Nations Disaster Relief Organizations, *"Hyogo Framework for Action 2005 -2015"*

and "The *Sendai Framework for Disaster Risk Reduction 2015-2030*" by The United Nations Office for Disaster Risk Reduction, "*Rebuilding for a more sustainable future: as operational framework*" by Federal Emergency Management Agency's, "*Sustainable Recovery and Reconstruction Framework*" by World Bank. Similarly there are national initiatives such as the "*Post Tsunami Recovery and Reconstruction Strategy*" by the Government of Sri Lanka, New Zealand Christchurch earthquake recovery authority's "*Recovery Strategy*" (Wilkinson and Mannakkara, 2014). These guidelines consist of land governance elements, such as land use plan to reduce disaster risk, land use restriction in vulnerable zones such as flood prone zones, fault zones, land development with provision of disaster resilience infrastructure, such as width of access roads , open spaces, buildings following appropriate building norms. In addition to the physical aspect, BBB also reflects to the socio-economic resilience and also the good governance principle such as equity, participation, transparency (Wilkinson and Mannakkara, 2014).

As a part of BBB in the reconstruction phase, the informal settlements might not be incorporated as they are not legal entities. Most of the government intervention focuses on the formal settlements. In certain settings, funds to rebuild a house are only released if formal land documentation can be supplied. This is always a challenge and is unrealistic in areas where land tenure was informal (Zevenbergen *et al.*, 2015). The disadvantaged groups who lack security of tenure are particularly vulnerable to disasters. The study of Usamah *et al.* (2014) on the vulnerability and disaster resilience of informal settlements state that social aspect like social capital, social network play a vital role in coping capacity during and after a disaster. Despite social resilience they are often affected by disasters due to lack of legal resilience and the relative consequences of disasters are also greater for them. Therefore, the issue of informal settlements is equally important and should be incorporated in the context of BBB.

4. DESCRIPTION OF CASE STUDIES

In this paper we consider two case studies that relate the situations of land issues in informal settlements in the reconstruction phase of post disaster. These two case studies are from Haiti Earth Quake of 2010 and India Earth Quake of 2001.

4.1 The Haiti Earth Quake
In January, 2010 an earthquake with a magnitude of 7.0 struck Haiti near its capital of Port-au-Prince. Within a week of the earthquake, hundreds of informal camps were erected across Port-au-Prince by persons displaced by the earthquake, termed internally displaced persons (IDPs). The earth quake killed an estimated 230,000 people across Haiti with approximately 375,000 dead or injured in Port-au-Prince alone (Bramante and Raju, 2013).

4.1.1. Land issues and informal settlements
Prior to the earth quake disaster of 2012, Haiti did not have a national land policy to guide access or allocation of land. Nor was there a clear legal system for registration, occupancy, ownership and transfer of land. This makes it difficult to recognize land rights of informal settlements that exist for the longer time. The rights of land owners on their land that is occupied by informal settlers are unclear, especially owners with incomplete documentation and inherited land that was not properly subdivided. The mechanism to cope with this problem has been individual negotiation with the people who have seized their land rather

than challenging them through the judicial system. However, in the aftermath of the disaster in 2014, the situation became more critical. The land owners themselves became more vulnerable, when land owners lost legal document or heirs lack proof of documentation for land rights due to the deaths of legal land holders. There was no security for the plot which was left by the landowners unoccupied for the timebeing. The unoccupied plots were informally encroached upon (Blake, 2015). Furthermore, the informal settlers often remain at their homes even when it is dangerous to stay in that place during a disaster, fearing they might lose their land. And without security of tenure, their homes are often rebuilt in a way that cannot withstand earthquakes (Myers, 2014).

Within a week after the devastating earthquake, hundreds of informal camps were erected across Port-au-Prince by persons displaced by the earthquake, termed internally displaced persons (IDPs). Approximately, 105,000 homes were destroyed and around 85,000 homes were damaged which resulted into nearly 1.5 million people dropping into IDP camps (Bramante and Raju, 2013). The spatial analysis of IDP camps conducted by Bramante and Raju (2013), reveals that most of the camps are located near the city centre, close to the airport and in higher areas as displaced Haitians fled there to have easier access to international aid and be safe from further effects of the earthquake, like tsunamis or slope failure. According to McCallin *et al.* (2015), 1.1 million IDPs were living in camps ten months after the disaster. Two years after the disaster, the IDPs population was 500,000 and in early 2015 it decreased to 64,700.

There was a draft shelter strategy to convert the IDP camp into a transitional shelter before stepping into permanent housing. In the transitional phase the aim was to provide the affected people with a secure, safe, private and dignified shelter for the duration until permanent housing could be reconstructed. The shelter process failed due to lack of proper technical feasibility assessment of type of the transitional shelter as a result of which it ended up as an object rather than shelter process. Due to the unclear processes and policies there was a delay in providing transitional shelters termed as T-shelters. By the time the T- shelters were available for deployment many camps had been allowed to densify and 'solidify' themselves. The settlers of the camps had already created their economic activities ranging from the beauty salons to internet cafes to food stalls. This self-created economic resilience left the camps to turn into permanent shelters (Sanderson *et al.*, 2014). According to the International Organization for Migration, as of December 2014, an estimated 21,218 households, or 79,397 people, remain homeless in 105 camps scattered throughout metropolitan Port-au-Prince and the region (Blake, 2015). This indicates that IDP camps converted into informal settlements.

One of the greatest institutional concerns in Port au Prince was the lack of clarity on land titles, lack of reliable government land records, and lack of evidence of ownership with the occupants and also there was no alternative mechanism to identify genuine claims. Therefore, land availability and ownership has become a large hindrance to the reconstruction. The land issues particularly include: proving land ownership where documentation has been lost or competing titles exist, rebuilding transitional shelter (T-shelters) on private land with negotiated land rental, eviction notices on camps by land owners, presence of camps on land allocated for other purposes, progressing camps into semi-permanent structure, land issues of informal settlements (Clermont *et al.*, 2011). Besides land tenure issue, the lack of land use zoning and regulations also hindered the reconstruction phase. As indicated in the studies of Hooper (2015), there was a diversified spatial preference of different actors such as

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government, international and national NGOs, bilateral development agencies and private developers in long term housing construction in the aftermath of the disaster. The institutional weakness and lack of proper land use plan and zoning have triggered the various actors to act according to their own logic and preference of housing site selection. According to McCallin *et al.* (2015), the institutional weakness, such as lack of leadership in guiding reconstruction effort, clear roles and responsibilities in various government agencies, lack of a coordinating national agency and policy framework, had seriously effected the activities of international respondents such as USAID, World Bank, UN- Habitat. This has led the international agencies in defining the minimum standards and operational priorities. Moreover, the informal settlements are seriously impaired in the implementation of humanitarian reconstruction standards.

International organizations like the British Red Cross (BRC) were actively engaged in providing shelter assistance to people affected by the disaster. The land tenure issue made the actions of BRC less effective. However, some temporary measures were feasible, such as paying rent to land owners for three year periods or negotiating with land owners for extended land usage. The BRC implemented a neighborhood plan when landowners were able to prove their ownership. The informal settlements that lacked legal documents could not become the real beneficiaries. To get the support for reconstructing their houses, the land owners themselves approached the organization. The clearing of the rubble and preparing of the pieces of land with clear land titles has been the mandate for land owners. The land rights issues were beyond the control of NGOs and there was no access to land related databases. An overall implication of the lack of clarity on land titles, lack of space to build infrastructure and legal hurdles in providing any services with a semblance of permanence, is that all intervention programmes took place in a piece- meal manner lacking national recovery of the country (Clermont *et al.*, 2011).

Several years after the occurrence of the disaster, land governance has become the critical factor that hinders the reconstruction phase (Myers, 2014) . When the importance of land tenure and land rights issues in the reconstruction phase was realized, the Haiti Property Law Working Group (HPLWG) was formulated in June 2011 in partnership with the Architecture for Humanity and Habitat for Humanity with support from the Digicel Foundation (Frederique, 2011). The mandate of this working group was to create a series of manuals in order to assist users like international and national agencies and the private sector in reconstruction phase of the aftermath of the disaster. In this regard, the first volume of manual "How to Guide for the Legal Sale of Property" was published in January 2013 and was formally endorsed by Government of Haiti. This guide provides legal procedures and land rights in an accessible manner. Similarly, the second volume "Securing Land Rights in Haiti" was published in March 2015. This manual is intended to provide a legal blue print for addressing the rights of property owners and informal settlers (Frederique, 2011).

4.2 The Gujrat Earth Quake: 2001

On 26 January 2001, an earthquake of 7.7 on the Richter scale hit the Indian state of Gujarat. The epicenter was located in the Kutch district. The earthquake killed more than 20,000 people (Mukherji, 2015). The various cities (Anjar, Bhachau, Bhuj and Rapar) of this district turned to rubble. The city of Bhachau was close to the epicenter and suffered the worst devastation with more than 2000 people killed out of 35000 population (McCallin *et al.*, 2015).

4.2.1. Land issues and informal settlements

The Gujrat State Government is responsible for land issues and its administration in land governance (Fitzpatrick, 2007). Prior to the 1990s, the state of Gujarat state had a policy to distribute land tenure, called "Sanad", to the settlers occupying the land informally. "Sanad" is a type of tenancy title by which the state confers the right of occupancy to a squatter on a piece of public land. This title is non-transferable, meaning that, they are not allowed to sell that land to a third party. Still in a small city in Gujrat like Bachhau, not all the informal settlers have "Sanad". The rationale behind this was that communities who have political back up had the support to put forward their land tenure case while the communities not having any political support were left behind. The city of Bachhau was designated as an urban area in the 1990s, which caused administrative changes in land tenure decision, i.e. the power of decision has shifted from the local level to the District Collector's Office. However, at that level there was less preference in the issuing land tenure and was stopped. As a result, the informal settlements were left without any type of occupancy documents (Mukherji, 2010).

In the aftermath of the disaster, reconstruction was not permitted only until planning and zoning of risk sensitive areas was completed and a building permit was given almost two years after the earthquake occurred (Fitzpatrick, 2007; Mukherji, 2010). The Government tried to relocate some villages. However, after having met with resistance from the land owners, the government initiated owner-driven reconstruction rather than contractor-driven reconstruction (Jigyasu, 2002). The Government then introduced the program to provide financial assistance to the land owners to rebuild their houses. Since many people lost their land titles and ownership certificates along with other documents and there is no electronic register for land titles, the alternative evidence via documents such as electricity bills, telephone bills are accepted during reconstruction phase. However, the programme was less favorable to the marginalized groups like the renters and the informal settlers (UNISDR, 2010). Due to unfavorable policies, most of the long-term renters in Bachhau became informal settlers on public land after the earthquake (Mukherji, 2010).

The housing recovery policy for the informal settlers who had an occupancy certificate was unclear. It lacked clear guidelines on how and on what basis financial assistance would be made available to the informal settlers. The policy stated that the destroyed squatter houses (built with foundations and walls made of mud or burnt bricks with cement mortar) would get financial assistance at the rate of 2,200 rupees ($52) for every square meter of built-up area with a maximum limit of 55,000 rupees ($1,294). Moreover, shanty units (small, crude dwelling without a foundation and typically made of mud, thatch, cardboard, or tin sheets) would get 7,000 rupees ($165) as public assistance. Yet the policy did not specify a number of aspects of the plan, e.g., how local authorities would verify long-term squatters, what the definition was of a squatter house and a shanty unit, or whether the newly established seismic safety building codes would apply to squatter houses. Not surprisingly, the lack of adequate guidelines to address squatter needs created much confusion during the execution of the housing recovery programme (Mukherji, 2010).

Realizing the complexities of policy, the local NGO "Unnati" made an advocacy for the housing rights for informal settlers. The NGO was able to take local authority Bacchhau Area Development Authority (BhADA) on board in its advocacy. BhADA is an agency appointed

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by the Gujarat state government to implement and coordinate urban development and housing reconstruction in Bachhau. The rationale behind the agreement of BhADA was that the city consists of more than 40% of informal settlers and that the city was not the administratively centralized capital city and also a politically less sensitive city. The NGO together with BhADA were successful in negotiating the housing assistance. Hence, the informal settlers with tenure were eligible for an assistance amount from 60,000 rupees to 100,000 rupees ($ 1,428 to $ 2,380) depending upon the housing damage and the construction type (masonry or reinforced-concrete unit). Further, BhADA together with NGO forwarded the alternative of land tenure arrangements by incorporating the documents like Bachhau ration card. Then household with ration cards became eligible for housing assistance of 55,000 rupees ($ 1,309). Further, the study of McCallin *et al.* (2015) had mentioned that the involvement of citizen support cell, Nagrik Sahyog Kendra (NSK) in collaboration with BhADA and the Gujrat State Disaster Management Authority (GSDMA) were able to regularize the land tenure of 1,300 out of 1,767 families on the basis of their proof of residence in Bhachau. The regularization of land tenure made them eligible for financial and technical assistance in rebuilding their house as per earthquake resistance building norms.

Similarly, the study of Balachandran (2006) shows how the Environmental Planning Collaboration (EPC) had adopted various methods and instruments which address BBB elements. During the reconstruction phase of the Bhuj city, the key activities like mapping property, preparation of a city level development plan to mitigate vulnerability, the development of urban infrastructure and supporting the community initiative planning had been conducted. It also revealed that the proposal of the development plan consisted of the allocation of land for social infrastructure such as hospitals, parks, educational buildings, shopping facilities to serve for low-income groups such as informal settlers. Moreover, it was mentioned that there were special provisions for informal settlements in the policy packages for the earthquake victims. However, the study does not mention how the land issues related to informal settlements were tackled in the reconstruction phase.

5. CASE ANALYSIS IN CONTEXT OF LAND GOVERNANCE OF INFORMAL SETTLEMENT AND BUILD BACK BETTER

The analysis of the cases is conducted to explore the land governance elements and its impact on informal settlements. The LGAF elements like recognition of a continuum of rights, enforcement of rights, restriction of land use rights, clear institutional mandate and participatory land use planning and zoning are applied in analyzing the case studies. These land governance elements of informal settlements are found to be relevant in the context of BBB.

Recognition of a continuum of rights: The Haiti case study shows that in the aftermath of the disaster, the NGOs and INGOs could not act effectively. The lack of a clear land ownership situation is most often a critical factor in the informal settlements. Due to unclear land rights and lack of alternative provision of land ownership documents that recognize the settlements, the international agencies like BRC failed to provide better shelter assistance. In contrast, the Gujrat case study shows that there exists alternative form of tenure arrangement like "Sanad". However, the implementation of a continuum of land rights does not exist. Due to the lack of occupancy document in all informal settlements the NGO like "Unnati" was unable to provide

shelter assistance to improve the houses. "Unnati" together with BhADA lobbied and succeeded in changing the criteria for land tenure and also NSK together with BhADA were able to regularize the land tenure in one city Bhachau but the issue seems to be tackled at city scale only. Both cases do not reflect any group rights recognition in informal areas.

Enforcement of rights: Realizing the importance of land rights and tenure security of informal settlements in the reconstruction phase for risk reduction, the case study of Haiti shows that there is an initiative to develop a guide line that recognizes and enforces the land rights. In Gujrat case, it was revealed that documents like "ration cards" have been adopted to prove their residence and their land rights. However, it also reveals that a workable mechanism to enforce land right rights of informal settlements is important to improve the settlements in a better way.

Restriction on land use rights: The Haiti case does not reveal that there was any land use restriction in the aftermath of the disaster. The informal settlers sit on land though it was vulnerable because of fear of losing access to their occupied land. On the other hand, IDP camps remain for a longer duration with commercial activities starting in the camps. While, the Gujrat case shows that a building permit was not allocated till the risk reduction land use plan had been implemented. However, there were no clear rules that applied to informal settlements about following building norms while using the land for shelter purpose.

Clarity of institutional mandates: The weak institutional framework is the main problem in the Haiti case which had created conflicts during the reconstruction phase. The lack of institutions and clearly defined roles of government as well as international development agencies in tackling land issues especially in disaster affected areas seriously affected humanitarian response. This effected the informal settlers more severely. To overcome the weakness in existing institutional aspects such as planning rules, building rules in informal land or for informal settlers, the development agencies took the initiative in defining minimum standards and operational priorities. Following the Gujarat case, it was revealed that there was a strong institutional framework compared to Haiti. The Gujrat State Disaster Management Authority (GSDMA) was the leading governmental body. In the reconstruction phase, GSDMA in collaboration with the local authority and the civil society had initiated tenure regularization in order to facilitate a technical and financial response in building houses.

Land Use Planning: The Haiti case study revealed that no land use planning and zoning was adopted in reconstruction phase. The informal settlers stayed in a hazardous location due to fear of dislodgement from the occupied land. However, the Gujrat case shows that there was immediate restriction in reconstruction till land use zoning was completed. Further, there was a participatory approach in developing the city level plan of Bhuj city. It was also revealed that the planning proposal consisted of special consideration for informal settlements in terms

of providing physical, and social infrastructure. The detailed study of regularizing informal settlements by spatial planning has not yet been reflected in the case study. However, it provides reflection that the initiative in the aftermath of the earthquake has incorporated the BBB elements.

6. KEY LESSONS LEARNT BASED ON CASE STUDY AND OTHER RESEARCH

The following key lessons learned are provided based on the theoretical framework and results of the above two case studies. In the case studies the elements of land governance in informal elements are explored and analyzed in the context of BBB. In the case studies, especially in the Haiti case, it seems that the elements of BBB were not applied, whereas in Gujrat case, the actions towards BBB are reflected.

Poor land governance increases vulnerability to a disaster in the informal settlements

The weaknesses in the institutional aspect which fails to recognize the land rights of informal settlers during pre-disaster phase result in a severe back log in the humanitarian assessment in the post disaster phase. Most of the displaced groups who lack land tenure documents wish to return to their land as soon as possible because they fear dispossession and loss of land. Government intervention may not include the informal settlements in the risk reduction infrastructure and disaster risk assessments. The building by laws, land use regulations do not apply to those settlements which are not legal entities. This might prove to be a hurdle to the key category of the BBB framework which consists of risk reduction by improving structural design and land use planning (Wilkinson and Mannakkara, 2014).

Access to land and clear land tenure is pre requisite to Build Back Better

Another key lesson learned is that clear land tenure and access to land becomes important in the post-disaster phase. During the after math of the disaster, various actors and donor agencies were found to be active. This in fact creates opportunities to fulfill the category of community recover. As mentioned in the BBB framework by Wilkinson and Mannakkara (2014), besides physical upgrading social recovery and economic recovery of vulnerable groups is equally important. However, due to lack of clear tenure the recovery and reconstruction measures cannot be executed. This is reflected in both case studies. Hence, tenure security creates unfavorable situation for donor agencies to build permanent and better shelter, preserving social structure. Moreover, lack of legal documents creates a barrier in using a land or a house built on that land as a collateral in financial institution which ultimately distracts the settlers from economic recovery (De Soto, 2000).

Institutional weakness is a key hurdle for land governance and BBB

The third lesson learnt from the case studies is that a lack of strong state authority creates a critical barrier in the humanitarian response in different phases after a disaster. As it is reflected in the Haiti cases, the lack of strong leadership in the post-disaster phase left many international development agencies that were deployed for humanitarian support in confusion. In this aspect various agencies followed various norms. Whereas in the Gujrat case, it was revealed that there was an institutional back up like the Gujrat State Disaster Management

Authority (GSDMA) on a state level and the Bacchhau Area Development Authority (BhADA) on city level. The NGO and Civil society activities were conducted in close coordination with the government authority.

A non-government actor plays a significant role in addressing weak land governance

The fourth lesson learnt from the case studies regards the role of non-government and local authority. The NGOs and civil society play a vital role in overcoming pre-disaster existing weak land governance institutions. As it is reflected in both case studies, the INGOs, NGOs manage to define alternative approaches to generate relative land tenure in order to provide shelter assistance to the informal settlers. As highlighted by Doberstein and Stager (2013), the funding aid from international donors needs to be applied in the risk reduction approach. Investments in the informal settlements that lack legal tenure security do not reduce vulnerabilities. It is shown in the case of Gujrat that there are no clear guidelines regarding the application of building codes during the reconstruction of shelters in the informal settlement. However, the donor agencies find the method to overcome existing weaknesses in institutional aspect. In fact most of the organizations work within a restricted time frame which creates a barrier for them to wait until there is improvement in land governance institution (Fitzpatrick, 2007). Furthermore as highlighted in Haiti's case, the international organization has a significant role in improving the land governance of the country by bringing various stakeholders on board. The management of various stakeholders to solve conflicting interests is also a key factor in BBB framework as highlighted by Wilkinson and Mannakkara (2014) and this can be achieved with improved land governance.

7. CONCLUSION

Though weak land governance has effects on the different stages of the post disaster phase, our study basically focuses on the reconstruction phase of the post disaster phase. The analysis of our case studies reveals that informal settlements are a disadvantaged group in post-disaster settings. The weak land governance restricts the opportunity to building back better in informal settlements. Though the social aspects play a vital role in the coping capacity of informal settlers and lessen the social and economic venerability to some extent, lack of a clear legal framework creates hurdles in bouncing towards a less vulnerable community. The examples of less vulnerable communities are: residing in less vulnerable zones, technical support in adopting earthquake resistance building norms and the opportunity to get financial assistance to rebuild their house etc.

The key lesson learned from this study draws in the conclusion that to reduce vulnerability for future disaster – the basic norms of BBB - the land governance for informal settlements need to be enhanced by strengthening the institutional dimension of land governance as well as implementing a land use planning tool with participatory approach on cummunity level. While strengthening institutional dimension, the pro-poor approach of land recording and continuum of land rights need to be defined in land policies and rules to restrict elite groups as beneficiaries.

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Reshma Shrestha, Arbind Man Tuladhar and Jaap Zevenbergen
Exploring land governance in post disaster: a case of informal settlement

BIOGRAPHICAL NOTES

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