

Chapter

HABITUS: HOW CULTURAL VALUES SHAPE LOCAL COMMUNITIES’ PERCEPTIONS ABOUT FLOOD IN THE OKAVANGO DELTA OF BOTSWANA

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ABSTRACT

Floods and flooding events are of central interest in the studies bordering on the Okavango Delta ecosystems, the sustainability of which depends on regular water flow. Nonetheless, as beneficial as flood pulses might be to the river basin and the riparian communities in and around it, extreme flooding events continue to impact on rural livelihood systems and people’s well-being in the area. This chapter employs the concept of Pierre Bourdieu’s [1930-2002] habitus and the use of qualitative data (obtained through key informant interviews) to analyse and explain how cultural values shape people’s perceptions and how they respond to natural phenomena (such as floods), which impinge on their living conditions. Through the application of Kurt Lewin’s [1890-1947] field theory and 3-step model of planned change, and in partial combination with Bourdieu’s field, the discourse offers insights on how scheduled change agencies could better understand the social forces that perpetuate undesired and desired behaviours of individuals comprising their clientele systems and how this understanding could enhance the

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application of appropriate planned change program for achieving behavioural change in the periods of emergency triggered by water inundation.

Keywords: Community, perception, floods, riparian, culture, livelihoods, field, social change, behaviour

INTRODUCTION

The incidents of natural hazards and disasters are not new to mankind. While a natural hazard connotes any hydrological, geophysical and atmospheric event (e.g. flood, earthquake, tsunami, cyclone, drought, etc.) which can constitute potential loss or harm to the people and environment, a natural disaster is an extremely hazardous event, which could result in disruptions and, loss of lives and properties in any human settlement or community thereby leaving the people at the mercy of external aid or assistance (Benson and Twigg, 2007). Extreme weather events experienced across the globe in the recent times continue to pose a threat to humankind particularly the vulnerable and poor people. Admittedly, these extreme events are connected with the global climate change and continental Africa is among other regions expected to bear the burden resulting from these alterations (see Schaeffer *et al.*, 2013). Thus sub-Saharan Africa will bear the brunt of the devastating effect of inclement weather conditions induced by changes in weather patterns. Southern Africa, where Botswana is situated, is not an exception. In the recent times, climate variability and extremes have been felt in the form of extreme flooding and droughts in the region. While the 'normal' rainfall in southern Africa ranges from 50 mm to over 1000 mm, recent changes in weather events have resulted in erratic rainfall leading to either extreme floods or severe droughts (Chenje and Johnson, 1994; World Meteorological Organisation [WMO], 2000). Amongst others, the disruption of farming activities by a combination of severe dry spells and floods from 1999-2001 impacted negatively on food production, making many countries in the region to grapple with severe food shortages. For instance, Zambia, Namibia and Botswana experienced significant declines in coarse grain production as a result of these extreme climate events (United Nations Food and Agricultural Organisation [FAO], 2001).

Through a critical discourse analysis, this chapter employs the concept of habitus and field theory to unearth the sociological and cultural dynamics that influence people's predisposition towards certain 'deviant' behaviours within a social milieu. Using case study design, it goes further to analyse the influence of

culture on people's perception about and predisposition to natural hazards like floods. The chapter then employs Kurt Lewin's 3-stage model of planned change to explain and suggest how community people's perceptions and predisposition could be positively changed in the events of natural disasters like extreme flooding within and around the Okavango Delta of Botswana.

The chapter begins by introducing the reader to the ecological dynamics of the Okavango Delta in north-western Botswana, and the people who live in the area.

Okavango Delta, People and Floods

The Okavango Delta, which is one of the largest freshwater environments in southern Africa and one of the largest inland deltas in the world, covering an area of about 15000 square kilometres of pristine and natural feature of diverse flora and fauna (Zambezi Safari Travels [ZST], 2012; see also, Mendelsohn *et al.*, 2010). The uniqueness and natural splendour of the Delta informed the unanimous decision of international environmental experts to officially declare it as one of the 7 *Natural Wonders of Africa* in Arusha, Tanzania on 11th February 2013 (Seven Natural Wonders of Africa [SNWA], 2003). Not existing in isolation, the Okavango Delta derives its water from the Cuito and Cubango Rivers which flow from the central highlands of Angola. Triggered by huge subtropical storms, the rivers flow through Namibia's Caprivi Strip¹ as Kavango River and then finally entering northern Botswana at Molembo (see Figure 1). Each year, an average of 9.3 million cubic meters of water empties into the Delta (Mendelsohn *et al.*, 2010: p42) and drains away into the Kalahari wastes of the south plains through lagoons and channels (see ZST, 2012). The cyclical nature of water flow and the attendant seasonal floods (see Mendelsohn *et al.*, 2010: p40) to a high degree influence the livelihood systems and pattern of the inhabitants living in and around the Okavango Delta. Riparian communities and people found along the river banks of the Delta are largely engaged in fishing, arable farming and livestock husbandry. Thus flood recession farming traditionally known as *Molapo* farming is popular amongst the people. It is instructive to note that these riparian community people - through the community-based natural resource management (CBNRM) framework - also engage in tourism activities such as tour guiding and traditional

¹ In what appears like a move to obliterate Namibia's German colonial history, the government on the 8th August 2013 renamed the Caprivi Strip (a 450km² area popular for its tropical rivers and wildlife) as the Zambezi Region, after the river that forms the northern border with Angola. (see <http://www.news24.com/Africa/News/Namibia-renames-Caprivi-Strip-20130808>)

Cross [IFRC], 2009) and agricultural harvests (Motsholapheko, 2011). During the period, an estimated 620 families or 3798 persons had been affected in Nata, Gweta, Seronga, Ikoga, Tubu, Nxamasere, Etsha 6 and Etsha 13 where about 600 huts and 76 modern houses were damaged by the floods. Apparently warned about the impending flood by relevant scheduled agencies, some community people, because of their cultural values and spiritual attachments to the land, did not evacuate from their properties already situated along the path of the flood (Kolawole, 2012). Somehow, certain community people's awareness about the impending danger, which the flood might constitute, seemed not to be in congruence with their perceptions about the magnitude of the problem and the need to find alternative means of livelihoods. Their acculturation with flood events and how they manage them as well as the need to stay close to their means of livelihoods, which the risk-averting messages conveyed to them did not cater for, informed the need to hold fast to the known rather than the unknown. Although acknowledged that associated water borne diseases and reptiles could pose a threat to their well-being (see for instance, Ditlhakeng *et al.*, 2012), community people continue to brave adverse ecological situations in their search for survival. This will be revisited shortly.

THEORETICAL UNDERPINNING

Habitus and People's Pre-Disposition to Floods

The thrust of this chapter finds its relevance in the concept of habitus, which originally was an idea mooted by Aristotle. Although many scholars approach the concept from different perspectives, the proposition as to how and why people in a social group are culturally entrenched in a particular way of ordering their lives, and then predispose themselves to certain behaviours in record history makes Pierre Bourdieu's work more appealing in the context of this writing. Unlike the body habitus (medically known as physique), which explains the phenotypic and genotypic constitutions of an individual's bodily make-up and how he or she by these becomes naturally predisposed to some form of disease(s) (American Heritage Dictionary of the English Language [AHDEL], 2003), Bourdieu's habitus simply explains an individual's make-up as engendered by his or her social environment and certain value orientations associated with it. Habitus typifies the cultural underpinnings and structures embedded in people's bodies and minds. Thus, the notion of how people perceive and read meanings to the physical, natural and socio-cultural phenomena around them is particularly rooted

in Bourdieu's (1977) habitus in relation to its dependency on history and human memory. For instance, a learned behaviour or belief within a given cultural setting is perpetuated through the socialization process within a social structure long after the reason for the behaviour or belief has been forgotten or can no longer be recalled by the emerging new generations in that given culture. Simply defined, habitus depicts 'the way society becomes deposited in persons in the form of lasting dispositions, or trained capacities and structured propensities to think, feel and act in determinant ways, which then guide them' (Wacquant, 2005: 316) in their predisposition and creative responses to overcoming the challenges associated with their external environment. It is the objectification of social structure in the individual's subjectivity; the 'internalization of externality and the externalization of internality'. In other words, habitus is created through a social, rather than an individual process leading to certain social patterns that are long lasting and transferrable from one social context to another but which also shifts in relation to specific social contexts and over a period of time. In Mauss' (1934) own term, habitus is an embodiment of material and non-material dimensions of culture peculiar to certain individuals, groups, societies, etc., which are most apparent in the 'learned habits, bodily skills, styles, tastes, and other non-discursive knowledge that might be said to "go without saying" for a specific group...' and this is perceived to operate below the level of 'rational ideology'.

Habitus in relation to the stages of its development, takes two distinctive forms – the primary and secondary habitus (Wacquant, 2013; Bourdieu and Passeron, 1977 [1970]: pp42-46). In his own terms, Wacquant (2013) conceives primary and secondary habitus as 'generic' and 'specific', respectively. While primary habitus is basically the 'experiential' mode by which people directly acquire and learn about their societal way of life through non-formalized, socialization process, secondary habitus is the 'didactic' or formal educational mode through which all other multiple habitus are acquired (Wacquant, 2013). It is thus impossible for an individual to acquire any variety of specific habitus without first acquiring the generic habitus either peculiar to his or her own family of orientation or social grouping. As such, the primary habitus is the foundation for the secondary habitus. In Loïc Wacquant's own words, '[e]very agent has a primary (generic) habitus, which is both springboard and matrix for the subsequent acquisition of a multiplicity of specific habitus' (Wacquant, 2013). Indeed, it is safe to infer that the unique experiences and the personality acquired by an individual within a given social setting are as a result of the habitus associated with the society in which the individual grows and develops. Habitus is thus an embodiment of a social process rather than that of an individual's. It is about the unfolding of a group in relation to how members perceive and interpret

the daily occurrences within their culture. Perhaps cognitive mapping and validation play a significant role in the way people perpetuate certain belief systems within a given society. How people bury their dead, how they relate with one another on a day-to-day basis, how they get attached to certain symbolic and cultural traits, the reasons as to why people conduct themselves in certain ways in a given social system and most of which can no longer be explained, are a form of habitus. For instance, whenever rural dwellers are obliged to explain the reason(s) behind their responses and reactions to certain phenomena (whether natural or social), we are often informed: 'That is how our forefathers did it, and we cannot afford to deviate from the norm. But then, habitus 'is not fixed or permanent, and can be changed under unexpected situations or over a long historical period' (Navarro 2006: p16). Indeed habitus is not rigid but 'fully amenable' and malleable to new experiences (Wacquant, 2013; Bourdieu, 2000 [1997]: p161) acquired by the individual through some form of organized, educational processes. Many years before reflexivity became popular amongst scholars, Pierre Bourdieu had proposed a 'reflexive sociology'. Thus Bourdieu was of the opinion that people need to recognise their biases, beliefs and assumptions in a bid to make sense out what happens around them (Navarro, 2006). In other words, in-depth and careful reflections will allow people see why 'rationality' should take pre-eminence over 'irrational' decisions and actions. I will return to this in the following section.

In the present context, the analysis of how community people get permanently attached to their Ancestral land has some bearing on their conceptualization of the spiritual dimension of property acquisition, ownership and management. The reason as to why some people find it difficult to detach from such personal properties in the advent of potentially catastrophic natural events (like flood, cyclone, etc.) is essentially the thrust of this chapter. Although they may have received warning signals, the presumed notion of the need to save properties without an iota of reflections about the jeopardy this might cause precious life and people's well-being may probably find explanation in how people's perceptions are shaped by their habitus. Better still, the need to hang on and not let go the existing livelihood systems and the difficulty one might experience in embracing change and living in a totally different socio-ecological environment may further explain the why people find it difficult to relocate whenever the need to do so arises. Although flood causes disruptions to human life (Meyer and Bendsen, 2003; Motsholapheko *et al.*, 2011), some of the reasons why the affected communities do not seem to heed warning signals in the advent of flood have been established by literature. These include the discrepancy in the way institutions and communities perceive risks (Magole and Thapelo, 2005), poor

communication infrastructures and logistics (Ditlhakeng *et al.*, 2012), low level of education within rural communities (VanderPost, 2010), which limits job opportunities in the formal sector and possibly elsewhere (Ditlhakeng *et al.*, 2012). Indeed, the ecological peculiarity of Botswana is a major factor influencing how people perceive and respond to water issues. Situated in the midst of the semi-arid Kalahari region, the entire country is parched and receives little rainfall during any given raining season. This single most important factor makes people to attach great importance to water! The Batswana associate rain with some form of blessing. This is locally referred to as *Pula*. A riparian community elder provided a balanced viewpoint on the positive and negative impacts of floods on his people during a key informant interview session in December 2013. He remarked thus:

‘Floods are perceived as a form of blessing because they bring life to our people. As we rely more on the river for our daily livelihood activities, we get more food such as fish and water lilies, which serve as vegetables. During the floods, our mode of transportation changes and becomes less expensive when we have high floods; we travel to other villages mostly by canoes as opposed to the not-easy-to-come-by vehicular transportation. But since 2009, however, we have been receiving above normal floods. Although flood does not affect our houses, it impacts negatively on our daily chores and vehicular movement and social service provision (like health care)...We end up travelling long distances to seek medical attention. As animal movements are restricted in the events of such flood episodes, livestock starvation and mortality are not uncommon. Floods also induce human suffering and ailments such as diarrhoea, skin diseases and malaria, and other fevers. When we experience flood, our youths by their nature quickly relocate to other villages because they are always on the move. This leaves the elderly people in the community helpless as the old people rely mostly on the assistance provided by the younger ones.’ (Mr. Galethuse: Daonara community).

While community people acknowledge that floods could constitute a natural hazard to their well-being, their perceptions about the benefits that water availability confers on community sustenance and livelihood systems are crucial and more important than anything else. It is understandable then that local people who regularly experience long drought spell and whose major source of livelihood depends mainly on water would thoroughly embrace flood howsoever the magnitude would be in any given climatic event. Rather than perceive flood (be it extreme or otherwise) as a destructive force, community people see it as a part of the ‘...biodiversity production system and a source of livelihood’ (Magole and Thapelo, 2005) on which traditional flood recession farming system depends.

Most certainly then, habitus, which predisposes an individual to avoid situations or conditions to which he or she is not naturally adapted, appears to be a strong influence in community peoples' conservative tendency to stick to what they have. While relevant government institutions and non-governmental organizations (NGOs) were 'jittery' about the implications of the impending flood on riparian communities (such as Tubu) in 2004, many local people who would be primarily affected appeared unperturbed (Magole and Thapelo, 2005) and would readily surmise that 'flood is a phenomenon to which we are accustomed'. This viewpoint was further confirmed in a key informant interview exercise conducted in Tubu community in December 2013 during which the village *Kgosi*² shed more light on how community people perceive floods. He remarked:

'Floods are a blessing to our people because they do not adversely affect our houses. Instead, floods provide good opportunity for us to use canoe as the mode of transportation. More importantly, a flooding event brings with it nutrients to our fields which allows for good farming and food production. Besides, we are able to collect wild fruits from the river banks when there is enough water in the channels. Floods also stimulate the eventual growth of fresh fodders on which our livestock easily graze. And the aftermath of floods is the rapid growth of reeds and other tall grasses [meant for roof thatching], which we harvest for sale. Floods also prevent fire outbreaks in the surroundings. We find it more convenient to stay put here during floods because this is the only life we know – we grow up here and are adapted to the environment; thus we build our houses on relatively higher elevations. Yes, we have challenges but the only threat to life is crocodiles, which we sometimes encounter; they do attack our livestock.' (*Kgosi* Motshidiemang of Tubu community)

Clearly, two things emerged from the opinions of the village chief. First, community people perceive that the benefits derived from floods far outweigh the adversities they (floods) bring. Two, riparian community people are used to aquatic environments and are seemingly able to make internal and self-directed adjustments whenever the need arises, thus seeing relocation as unnecessary. Nxamasere community provides a good case study. While some residents of the village, who supposedly were hard hit by the flood events of 2009-2010 were relocated by the Land Board (Mosate, 2010), many members of the community did not relocate, possibly because they felt they were not seriously affected or they perceived that they could brave the consequences of adverse ecological

² In Botswana, the village headman or chief is traditionally referred to as *Kgosi*; when more than one, they are known as *Dikgosi*. In a way, the village headman or chief thus represents the voice of the community people.

conditions. Perhaps the reasons why certain community people are unwilling to relocate in the event of adverse floods (as provided by another village elder in Daonara community) will suffice:

‘Most elderly people do not have the penchant for relocating to certain designated places when we experience floods because they are not used to living in canvass tents [locally known as Dixhibi] provided for them by [the] aid or government agency; they would rather prefer to live under their own traditional houses. They prefer to remain in their settlement to plough on their own fields rather than start a new farming life in an unknown terrain where there are likely to be more predators and crop raiders. Besides, staying here enables us to readily have access to our own local food, which we prefer over and above the modern ones that are common in the urban centres.’ (Mr. Galethuse: Daonara community)

The community elder’s viewpoints above portray a strong boundary maintenance, which local people perpetuate in order to sustain their identity (see Loomis and Beegle, 1950) and stick to the known rather than the unknown. Thus the inability of local, elderly people to dwell in any other seemingly inferior forms of abode other than their traditional architectures even in ‘times of emergency’, and their inability to eat any other forms of food other than their local delicacies is an indication of a strong affinity for one’s own traditions.

Elsewhere in the mid Okavango Delta, community people in Jao Flats³ once discountenanced government’s directive on the need for them to relocate but rather saw the move as a form of control by the powers that be (Magole and Thapelo, 2005). Partly buttressing this claim, one key informant who is a Village Development Committee (VDC) chairman provided a vivid explanation on how community people perceive and respond to flooding events thus:

‘We do not see floods as a threat to us. Jao community is what we have known as our home; we have no other place to go! Our Ancestors lived here and we have all the attachment to this area. The only unpleasant experience we normally have is mainly in crocodile attacks on livestock – the beasts live along the river channels and they rarely go beyond that point. And our children are always instructed on how to avoid them. *Contrary to the viewpoints of mass media people on the surrounding water surge, we do not perceive increased water inflows as constituting any hazards as they (the news reporters) would make people believe - they do not provide correct and adequate information about disaster management [Emphasis mine].* We are a people who are so much conversant with water; we are born in a water

³ Jao Flats is a small island community located in the heart of the Okavango Delta (see Figure 1).

environment and raised therein. As we are accustomed to canoe mode of transportation, moving around becomes easier for us when we have enough water around here.' (Mr. Motswai: Jao Flats community)

As earlier indicated, strong attachment to land and properties, and local people's viewpoints about spiritual and Ancestral connections are some of the reasons why relocation becomes almost impossible in times of crises! Indeed, the VDC chairman's viewpoints above further support other key informants' opinions on their perceptions about floods. More importantly, there is a dissonance in the way warning messages are conveyed to community people by [the] relief or government agencies and how these messages are construed or decoded by the recipients of the information. It may then imply that cognitive, psychomotor (conative) and affective⁴ components of habitus (see for instance, Wacquant, 2013) find relevance in how institutions and change agents convey early warning messages and how community people in-turn perceive and read meanings to them. First, the way in which each party perceives and assigns meaning to flood and its implications (i.e. cognition) will play a crucial role as to whether or not both the change agents and community people would reach a consensus in addressing the flood problems at hand. Second, the dexterity with which the change agent employs his or her mental skill to physically drive the change process (i.e. psychomotor) as observable to and understood by the clientele system plays a significant role in bringing about social change. Third, the extent to which the change agent shows enthusiasm and readiness to invest his or her energy in undertaking the process of change [for which s/he is employed] with the sincere intent of seeking community people's well-being has a positive correlation with the measure of success achieved; one could probably predict the outcomes of events from the on-set where and when a change program is implemented perfunctorily by the change agent(s). Regardless of the impact, which their uncompromising stance might have on community socio-economic and physical well-being, groups who see themselves as vulnerable and powerless tend to engage in muscle-flexing by exhibiting passive resistance to government order, particularly in situations where they feel that the dividends of good governance have failed to reach them meaningfully.

⁴ The three concepts of cognitive, psychomotor and affective domains are originally rooted in Bloom's taxonomy of educational or learning objectives (see Bloom, 1994).

CULTURE AND PEOPLE'S PERCEPTION ABOUT FLOODING EVENTS

Culture is a way of life of a people, which is learned, shared and transmitted from one generation to the other through the socialization process. It encompasses shared ideas, norms, values and belief systems of any social grouping (see Ekong, 2003: pp23, 390). How people perceive their social space and how they read meanings to certain events (be they social, physical or natural) are influenced by their value orientations embedded within the cultural milieu in which they are situated. Traditionalism, fatalism and immediate gratification are some of the negative orientations that could impinge on community people's objective reflexivity in a bid to bring about improvement in their lives. But then, people naturally have the ability to: take control of their own lives through a reference value (a mental image/construction of the desired state); have a perceptual function (the ability to observe the status quo or existing state); devise a mechanism for making comparisons (the ability to compare the existing state and the desired state for differences); act to bring the existing state closer to the desired state (L. Smith, 1997; see also Kolawole, 2002). More often than not, how community people perceive a problem situation and not just a mere awareness of it would determine the kind of response or solution they are likely to provide in surmounting the problem by which they are confronted (see Kolawole, 2002). And individuals or a group's perceptions about the problem at hand are a function of the culture in which they find themselves.

Indeed, flooding events and how people perceive them are central to the argument in the chapter. In common parlance, flood portends danger or disaster (Magole and Thapelo, 2005) and has been seen as the commonest of all natural disasters, and that which brings both benefits and losses more than any other natural hazards thinkable (Smith, 1991: p259-260). While floods now constitute a perennial danger to both lowland and upland communities due to climatic change being experienced globally, communities in wetland areas such as those in the Okavango Delta perceive the situation differently where '...floods are critical for maintaining and restoring many of the important services provided to humans by wetland ecosystems' (Magole and Thapelo, 2005). As a result of the peculiar ecological system in which they find themselves, local farmers and community people in the Delta naturally rely on flood water for their livelihoods as rainfall scarcity and extreme dryness are a commonplace in the Kalahari region of southern Africa. In the Delta for instance, such benefits include the creation of a better habitat for biodiversity in both aquatic and terrestrial flora and fauna,

improved agricultural lands through alluvial deposits in the floodplains (Wisner *et al.*, 2004: p205) where local farmers engage in traditional flood recession (*molapo*) farming. The VDC chairman interviewed in Jao community corroborated this claim, saying that:

‘...this place is the only suitable location where we can thoroughly engage in our traditional (*Molapo*) farming activities; the soils are naturally replenished with nutrients by the annual inflow, and we engage in other sources of livelihoods such as basketry. Inflow of water enables us to have access to wild fruits and palm fruits (*Mokolwane*), which serve as food for us. In addition, there are only few animals that destroy our crops unlike what obtains in far away upland settlements.’ (Mr. Motswai: Jao Flats community)

Clearly, traditional agriculture is a component of the cultural base of rural communities. The specifics associated with a particular type of farming system and other livelihood strategies are apparent in the cultural traits and patterns prevalent in any local community. The riparian community people's value orientations as reflected in their traditional approach to farming deserve special interests. *Molapo* farming (which is a form of traditional agriculture whereby local farmers rely on flood recession to cultivate and tend their crops) is an age-long practice amongst the Batswana farmers found within and around the Okavango Delta. To this people, the cyclical flood pulses experienced as an annual event [during normal hydrological periods] in the area is perceived as a ‘form of blessing’ because of its importance to farming and other livelihood activities such as fishing, hunting and even tourism. Corroborating the importance of floods to tourism employment, a community elder affirmed that [*w]e derive other benefits such as employment provided by Community Trusts, which are not easy to come by when we go to other places in the hinterland* (Mr. Galethuse: Daonara community).

Regardless of the awareness about the unpredictability and extent of the flood pulses, which could engender loss of lives and properties in extreme cases (Magole and Thapelo, 2005); local people continue to brave flooding events and their associated ecological adversities whenever they happen. As earlier noted, the people's perceptions about the happenings around them and how they ascribe meanings to them far supersede the awareness of the events or phenomena. For instance, some southern African community people do not see soil erosion as a problem until it fully becomes a gully because ‘erosion-induced and localized soil types were believed to be so created by God’ (Kolawole, 2002; 2006; Cartier and Graaff, 1998)! Interestingly, what is often defined and classified as an urgent and emergency problem by development agencies may not necessarily be so seen by

local communities (see also Jongmans, 1981; Jungerius, 1986). Contrary to the notion that local people are often risk-averse and are not willing to venture into the unknown because of their low level of education and lack of exposure (see Kolawole, 2002), it is indeed paradoxical to note that many riparian community people on the one hand continue to defy ecological challenges to sustain their livelihood systems and uphold their attachment to land but on the other hand, and in an intricate manner, also exhibit a measure of risk aversion by not willing to find help elsewhere whenever the need arises to relocate to some other 'safe haven'. Where possible, the need to identify and implement behavioural change program through context-specific educational initiatives, which seek to enhance the knowledge, skills, and attitudes of the clientele system is indeed an imperative.

To move away from the status quo and ensure a meaningful social action program that enhances ruralites' objective reflexivity in the midst of chaos and uncertainty, there is need to shift and change old paradigms and come up with new frameworks in the process of alleviating the vulnerable conditions of the rural poor in the wetland plains of the Okavango Delta. The following section therefore explores the ways and means of effecting behavioural change in the development process in a peculiar social-ecological context.

FLOODS AND PLANNED CHANGE: REFLECTIONS ON THE OKAVANGO DELTA

In this section, I endeavour to explore practical approaches to behavioural change as it relates to the response of communities to floods and flooding events within the Okavango Delta. I wholeheartedly acknowledge Pierre Bourdieu's own proposition, which places emphasis on bridging the gap between objectivism and subjectivism through the relationship between habitus and field⁵ in social science research practice (see for instance, Wacquant, 2005; Navarro, 2006). Nonetheless, rather than use Bourdieu's field theory to fully complement his concept of habitus in this chapter, I have chosen a slightly innovative and integrative route to accomplish the task. The reasons are not far-fetched. First, Bourdieu's field theory

⁵ Pierre Bourdieu's field connotes 'a setting in which [individual] agents and their social positions are located'. The interaction between the individual's agent's habitus and capital (social, economic and cultural) and the prevailing sanctions or rules in the field determines his or her position in that given field. Fields interact with each other in a hierarchical fashion, depicted in power and class relations (Bourdieu, 1984). Thus a field is a social arena where individuals struggle and compete to acquire necessary resources for survival.

is mainly interested in the social activities that take place within a 'social room' comprising many fields. The social room is the larger society, which is the equivalent of a social system. The field is likened to the sub-systems operating within a given social system (e.g. farming, academic, religious and business communities). Within each field exists a set of 'rules of access' that govern people's (agents')⁶ actions, preferences, social relationships and practices, and how they perceive themselves and those outside their own field. Those sets of rules - acceptable standards, sanctions, norms, etc. - are what Bourdieu referred to as 'doxa' (Bourdieu, 1984: p141). Individuals in a field (community, in this case) must play to the rule of the game if they are to gain better positions and access the resources within that field. The fields are stratified based on social statuses resulting from people's ability to acquire certain capitals (social, economic, cultural or symbolic) (Bourdieu, 1986). Thus Bourdieu's field theory is about how individual agents struggle and compete to gain new positions and access resources (see for instance, Gaventa, 2003) by playing to the rules of the game associated with their own field. In sum, Pierre Bourdieu's field theory is central to power struggle and domination; it emphasizes how people imbibe societal ideals, preferences, choices, actions, social differences and hierarchies and power relations amongst members and those of other fields or communities outside theirs. It suggests the consciousness of one's own place and 'self exclusion' (Bourdieu, 1986: p471). It is nothing more than positions, tastes and power. Second, Bourdieu's theory does not offer any veritable pathway as to how to minimize the gap between desired behaviours and undesired behaviours of individuals within a social field as found in Kurt Lewin's propositions. While Bourdieu's work offers useful insights on how individuals predispose themselves to the elemental frameworks and machinations of their immediate environment, and by so doing enables the change agent to better appreciate and understand, to a considerable degree, the dynamics of any social grouping, it however falls short of concrete analytical schema of the fundamentals of human behaviour and the cogent pathway pointing to the practicality of resolving problems associated with undesired behaviour in a planned change program. As Gaventa (2003) puts it, '...Bourdieu concentrated [largely] on analyses of the media and academia, however, so it would be difficult to apply these insights directly to the development 'field''.

Relevant and most appropriate to this discourse, therefore, is the treatise of Kurt Lewin (1890-1947) on planned change. Planned change simply implies 'a

⁶ The concept of agent in Bourdieu's field connotes the individual person operating and competing within a social arena

direct and human intervention in the shaping and direction of change toward some predefined goals' (Ekong, 2003: p262), which as it were, is meant to deliberately alleviate people's miserable conditions. It is designed to counteract the effect of any unplanned or accidental change associated with natural disasters caused by extreme floods, cyclones, earthquakes, locust invasion, etc. which in themselves do not allow people to adequately plan before they occur. As such, planned change is a form of social action carefully geared towards achieving some desirable development goals within a given social milieu. For instance, the need for government to devise and implement an educational and awareness cum relocation program is an initiative deliberately targeting flood-prone communities in the advent of extreme flooding. Nonetheless, to successfully achieve this goal would mean that there is need to properly understand the dynamics of social groupings and behaviours of individuals in a community setting in relation to why and how they would respond to any external stimuli in any given [unpleasant] scenario.

That said, field theory enabled Kurt Lewin and his research team to identify and better understand the forces that perpetuate undesired social behaviours and those which reinforce desired ones in their attempt to fashion out strategies to either strengthen or weaken those attributes (as the case may be) so as to bring about the desired behaviours in people (M. Lewin, 1998). In other words, Kurt Lewin's desire to understand individual behaviour informed the development of a field theory, which was originally applied in physics. Nonetheless, he later used it 'mainly as a method for analysing and changing group behaviour' (Burnes, 2007).

Rooted in gestalt⁷ psychology that emerged in Germany in the early 20th Century (Köhler, 1967), Lewin's theory posits that an individual behaviour is a product of the totality of the co-existing and interdependent [social] forces, which impact on an individual or a group within a 'life space' (otherwise referred to as psychological, social or force field⁸) where the behaviour takes place (Lewin, 1942). As Lewin believed that an individual's behaviour is a product of his or her environment and how he or she reads meaning to external stimuli, taking into consideration the intricate nature and totality of that individual's psychological or perceptual environment while attempting to construct the person's life space will enable the change agent to understand, predict and change the person's behaviour

⁷ Psychologists conceive a gestalt as 'a perceptual pattern or configuration that is the construct of the individual mind. It is a coherent whole that has specific properties that can neither be derived from the individual elements nor be considered merely as the sum of them' (Kadar and Shaw, 2000 in Burnes and Cooke, 2012).

⁸ For Kurt Lewin, a field is an environment in which an activity takes place. By implication then, a social field is where a social activity takes place.

(Lewin 1943a). And to discern the individual or group's life space as conceived by Lewin himself, there must be an understanding of the person or group's verbal reports and how they perceive or make sense out of their own situations (Deutsch, 1968: p416). It is therefore not enough to base an individual or a group behaviour merely on the external stimuli that interfere with their state of equilibrium; the individual or group's subjective perceptions of the forces that impinge on them go a long way in explaining why they behave in the way they do. A combination of flood events and how community people perceive those occurrences in relation to their well-being is vividly captured in various locations within the Delta where village chiefs/elders and key informants voiced their opinions on how they perceived these natural happenings. The understanding that flood pulses are a life-giving, natural phenomenon without which riparian community's livelihood systems cannot be sustained explains why people would not necessarily see their (flood pulses) occurrences as a threat to life in the first place. While community people individually agree that floods could cause certain disequilibrium in the well-being of the community, their positive outlooks about the advantages conferred by flood events far outweigh their negative perceptions about this natural event. Whereas outsiders may have considered floods as a risk, it is 'a form of blessings' to those who are directly affected by them. Again, riparian community people's habitus - as evoked by the preference for one's own indigenous food and architecture, and a strong attachment to the land and Ancestors as well as the premium placed on certain peculiar agricultural systems (e.g. flood recession farming) - brings to the fore the reasons why people respond to flood in the way they do.

Thus the four major elements that comprise Lewin's planned approach to change include field theory, group dynamics, action research and the three-step model of change (Burnes 2004). But in this chapter, attention is focused on Lewin's field theory, the 3-step model and their relevance in the implementation of social change programs in rural communities. Indeed planned social change primarily originated from Kurt Lewin's (1939; 1940) field theory. Among others, and of much interest to this chapter, however, are two characteristics of the field theory attributable to Kurt Lewin. These attributes include the dynamic and psychological approaches which underline his field theory wherein he argued on the basis of the dynamic nature of the social forces in a life space. To him, a recognizable form of equilibrium is maintained in a social life constantly undergoing a dynamic process. Ultimately, alterations which appear as undercurrents regularly occur in a social life although they may go unnoticed because of their tendency to maintain a stable condition. He coined this as a 'quasi-stationary equilibrium' (Lewin, 1947) and posited that an alteration in and

from one 'quasi-stationary equilibrium' to another is ultimately engendered by an alteration in the psychological forces in a life space (Lewin, 1943b). In the context of this analysis, community people and elders quickly find a way of adjusting to their new realities when flood events bring certain unpleasant shifts. Thus the inability to travel by roads as a result of water inundation does engender an immediate shift from the 'not-easy-to come-by' road transportation to water travels through the use of canoe, which of course is perceived as cheaper and mostly preferred by the people. Ensuring that life must continue, the elderly people naturally would devise measures to circumvent any form of instability created by youth massive relocation to other communities during the floods.

From the viewpoint of psychological approach, Lewin argued that how individuals or a group perceive(s) their reality at a given point in time must be the observer's primary focus rather than attempting to construct it from his or her own 'objective' viewpoint (Burnes and Cooke, 2012). Therefore, the change agent must be cognizant of the fact that two different people who experienced the same phenomenon (e.g. a flooding event in this case) may have perceived the event differently (see Rock and Palmer, 1990). It is instructive to note that what is troublesome for one group may not necessarily be so for another (see Mendelsohn, *et al.* 2010: 110). Based on the information obtained from key informants, flood occurrences to some people, are a natural means for preventing bush fire and a period during which livestock fodders are readily available. To others, it is a trying time when animal movements are restricted, thus engendering livestock starvation, disease and loss! Indeed, the dissonance existing between an individual or a group's realities and those of others (outside their immediate environment) is most apparent in the viewpoints of the VDC chairman in Jao who commented that the mass media and government people's perceptions about flood is totally at variance with those of community people. While the former perceives flood as constituting a serious danger to life and property, it is a blessing to the latter - those who are accustomed to the natural event.

That said, Kurt Lewin's proposition - that individual behaviour is a function of the field or life space at the time it occurs but not in the past or future, and Pierre Bourdieu's habitus emphasis on history and human memory seem to have headed on a collision course. While Lewin's emphasis is on how individual or group behaviour is affected by the 'here and now' (Deutsch, 1968), Bourdieu's viewpoint on the same hinges mainly on what has happened in the past - an historical event. But seen differently, I reckon that an individual's behaviour [within a group setting] is most likely influenced and more strongly impacted by a combination of both past and current events. In other words, experiences of the past and the existing ones tend to reinforce individuals' perceptions about life

events and the prevailing phenomena around them, particularly so if those unique experiences do not tend towards dissonance.

It is only when individuals and groups are assisted to better comprehend and reflect on the social forces that encroach and impact on their lives that behavioural change could be achieved (Lewin, 1942). In line with Bourdieu's reflexivity on the need for people to think objectively about the happenings around them, Lewin's approach to planned change, which supposedly would create a platform that will enable individuals understand and reorganize their perceptions of the world around them (Burnes, 2007; Lewin, 1942) forms the basis for devising a participatory strategy for ensuring a pro-active social action and change. To a considerable degree, it appears that habitus and field theory are indeed not mutually exclusive; they complement each other in finding solutions to behavioural change. While Bourdieu's habitus seeks to elaborate on the individual constituents and how certain habits or ways of life are formed, replicated or perpetuated within a social space, Lewin's field theory places emphasis on the identification of factors or forces that perpetuate undesired behaviours and the factors that need to be strengthened or weakened in order to bring about the desired behaviours in individuals or groups within a given social field (M. Lewin, 1998). But then, achieving a change in behaviour would mean that other elements of Lewin's planned approach to change (i.e. action research and 3-step model) are fully deployed in the process of implementing a planned change program. In other words, while field theory and group dynamics are primarily concerned with the intricacies involved in the formation of social groupings and how they are stimulated and sustained, action research and the 3-step model are interested in how behaviours of individuals and groups are changed (Burnes and Cooke, 2012). Thus, both habitus and field theory serve as the foundation or structure on which the superstructures (i.e. any planned change programs) are built.

Over all, a holistic action-oriented research and development program that incorporate analytical techniques and issues that address the need to understand the forces that impinge on people, and how multiple realities of individuals and groups could be reduced to a single reality will help in bringing about behavioural change amongst community people.

Kurt Lewin's 3-Step Model of Planned Change

Although pummelled by certain criticisms that Lewin's Planned approach is too simplistic, mechanistic and has failed to recognize politics and power, and the incessant conflicts associated with human organizations, among others (see for

instance, Dawson, 1994; Hatch, 1997; etc.), but all of which have been objectively countered by some scholars (e.g. Burnes, 2004), Kurt Lewin's (1947), the three-step model of planned change, which is noted for its persistent influence on creating and managing change (see Hendry, 1996: 624) finds relevance here and can therefore be appropriately invoked. The three phases or stages comprise (1) unfreezing; (2) transitioning; and (3) refreezing. Through the application of force field analysis, the first stage occurs where and when the social forces that are striving to maintain the 'status quo' and subjective 'mindsets' are identified and dismantled or broken down by making use of appropriate communication channels. In the process, all attempts are carefully and painstakingly made to ensure that stakeholders or the clientele system see the enormity of the problem(s) at hand. To prepare the stage for transitioning and for people to completely move away from the status quo, Schein (1996) cited in Burnes (2004) had suggested 3 processes of (i) invalidating the status quo; (ii) inducting guilt or survival anxiety into the people; and (iii) creating psychological safety in their mind. For people to accept change and then transit into the new order, they must have concrete reason(s) why they must do so and '...those [directly and ultimately] concerned have to feel safe from loss and humiliation' (Burnes. 2004) that may arise due to the social change they suddenly undergo. Otherwise the unfreezing phase will not occur in the first place! Openness and honesty are required to get the job done. Transitioning, which Burnes (2004) also refers to as 'moving', involves the development of new sets of attitudes, behaviours, values, etc. through a well organized educational program and other relevant strategies to minimize the chaos that might ensue in the process of adapting to new change. The key to this second stage is good communication, negotiation, involvement and empowerment; community people relocated from flood prone areas would need some forms of adaptable socio-economic and cultural empowerment to enable them cope with the new change. The last stage, which is the refreezing phase, involves the crystallization and reinforcement of the new values, attitudes, behaviours, etc. This process involves the development of appropriate instruments to reward compliance to the new change, recognition and celebration of success, sanctions wherever and whenever possible, and sustained training and education. Otherwise there is the possibility for some people to return to the *status quo ante*!

Given this context, those attributes, which tend to subjectively predispose people to some seemingly 'illogical' and 'irrational' thinking [in response to emergency situations like flooding events] need to be identified and unfrozen, while desirable and pro-active behaviours could be frozen over a considerable period of time. Where and when by consensus people's multiple realities become a single reality with respect to a common cause or goal, there is an emergence of a

single understanding amongst the people or within any organization about the need to bring about meaningful and successful changes in their co-existence (see for instance, Boje and Rosile, 2010). Through context-specific and empathetic educational programs, it is thus assumed that the riparian communities of the Okavango Delta will be better equipped to understand the dynamics and implications of adverse effects of floods on their psychosocial and economic well-being.

CONCLUSION

The first section of this chapter provided a brief synopsis on the dynamics of the Okavango Delta river flow, and the socio-economic and cultural activities of the people living in the area. While the second section used the concept of habitus to explain why riparian community people in the Delta respond to floods in the way they do, sections 3-4 employed a critical analysis of Kurt Lewin's field theory [and partially complemented by Bourdieu's field] and the 3-step model to highlight key issues in understanding people's behaviour and how to apply these in bringing about community behavioural change in the period of natural disasters.

The lack of understanding of designated change agencies or government departments and non-governmental organizations (NGOs) as to why and how people behave in the way they do in times of extreme flooding and emergencies may have, in the past, engendered their (i.e. government and NGOs) failings and inability to convince certain community people to relocate from disaster-prone areas. Many community people were supposedly 'laid back' in their response to early warning messages provided them by relevant agencies possibly because their multiple realities about floods do not result in a single reality or possibly because their realities are not in agreement with those of the change agencies. Either way, there is a clientele-change agency reality dissonance. Most certainly, problems arise in the 'casting' of any local individuals' viewpoints about flood if there is a wide gap or 'distance' between their experiential knowledge (i.e. primary habitus) of the phenomenon and the kind of educational messages (i.e. secondary habitus) passed to them by the change agency. Assuredly, '[t]he greater that distance, the more difficult the traineeship' (Wacquant, 2013) on how to make local people perceive and manage flood disasters. Viewed from another perspective, the hierarchical positions and power relations amongst individuals within and between social arenas [fields] as enunciated by Bourdieu's field theory may explain why community people predispose themselves in the way they do in

their interactions with government agencies in extreme circumstances like flood disasters. The notion of 'us' and 'them' as depicted in Bourdieu's field constitutes a major barrier to any planned change program in situations where community people see external agencies (be they governmental or non-governmental) as 'exploitative', 'apathetic' and 'untrustworthy'. Many development programs did not succeed because change agencies fail to properly understand the social fields in which their clientele operate. Not only does this affect behavioural change, it has implications for a whole gamut of rural development programs in general. Behavioural change in itself is a learning process in which the acquisition of new knowledge, attitudes and skills play key roles in making people to change their 'perceptions, insights, outlooks, expectations [and] thought patterns' or gain new ones (French and Bell, 1990) about the events around them.

The findings show that although they admit that there are many ills associated with flooding, riparian community people believe that flood events confer on them many advantages (as they relate to community livelihoods and survival) over and above all the disadvantages of flooding. This disposition brings to the fore the significant effect of societal deposition in individuals. To a considerable extent, it indeed shows the influence of habitus on any people's behaviour and judgment about the happenings in their immediate surroundings. Whether we like it or not, rural people's cultural and environmental knowledge, which they have acquired over time, continues to shape their viewpoints and perceptions about themselves and the outside world. It is thus the primary onus of the change agency to devise strategies for effectively invalidating the people's perceptions about the need to adhere to certain customs and preference for livelihoods instead of personal safety and survival. It is also the duty of the change agent to find a way of motivating and convincing community people (through a well coordinated campaign and awareness programme) that bravery lies in one's ability to see dangers in adverse [ecological] situations and avoid them while at the same time activating in them a survival anxiety; a life fully lived is that which is replete with hope anyway. The change agency would also need to create in the people's mind some measure of safety psychology if only to convince endangered people to heed the voice of reasons in times of impending natural catastrophes.

Invariably, a positive result is achieved where subjectivity gives way to objectivity. But even so and admittedly, too, people are dynamic and complex; and so does development itself. Thus the solution for now may not necessarily be ideal for the future (see Mendelsohn, *et al.*, 2010). The understanding that people's perceptions about a particular phenomenon vary even though they have both experienced it in a similar way could however help the change agent to appreciate people and group's behaviours in a relatively complex human

organization and society. This will enable him or her identify the best strategy or approach to adopt in implementing a meaningful planned change program. There can be no futile efforts where the change agency and agent labour hard and strive diligently to close the wide gap that may have existed between the clientele's generic and specific habitus (on disaster management). Indeed, a multi-sectoral and disciplinary approach is needed to enable stakeholders see and analyze the problem situation through different development lenses. In so doing, an eclectic approach rather than a simple paradigm may have been more appropriate in addressing social-ecological problems and people's relocation in times of extreme floods.

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