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Unsettled Settled Spaces: Searching for a Theoretical ‘Home’ for Rural-Urban Fringes.

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Abstract- Rapid urban population growth has led not only to an increasing demand for urban land, particularly for housing, but also for other various urban uses. And that in many countries, the increasing demand for land is affecting rural-urban fringes. This paper attempts to situate the rural-urban fringe within the urban context by reviewing literature and theories on urban land use. The review of literature is guided by the view that there is no single dominant theory or paradigm of land use change and development.

A multiple conceptual review of different literature sources on land, housing, economic, urban, among others is done with the aim to derive partial insights on different aspects of a rural-urban fringe. The adoption of a multiple conceptual review provided insights into mechanisms of a rural-urban fringe land uses from different theoretical perspectives, with each emphasizing different but related aspects. Accordingly, within each of four substantive sections of this paper, the review organises the commentary by ideas drawn from different contexts.

The review thus is not aimed at comparing or contrasting various aspects of rural-urban fringes in different regions and countries but to build a case for what a rural-urban fringe and how issues within it can be understood. The theoretical approaches reviewed in this paper may aid in the conceptualisation of different aspects of the rural-urban fringe land uses, designing the research methodology and in the analyses of field experiences, rather than to prove the theories themselves.

Index Terms- Rural-urban fringe, land, theories, human agency, economy, urban.

I. INTRODUCTION

The process of urbanization is one of the most important drivers of economic, social and physical change in many countries (Clancy, 2008; Pieterse, 2008; Simon, 2007; Hall and Pfeiffer, 2000). Rakodi (1997: 1) argued that it is “almost a truism that the planet’s future is an urban one...” Aguilar and Ward (2003) indicated that rapid urban population growth has led not only to an increasing demand for urban land, particularly for housing, but also for other various urban uses. And that in many countries, the increasing demand for land is affecting rural-urban fringes.

This paper attempts to situate the rural-urban fringe within the urban context by reviewing literature and theories on urban land use. The review of literature is guided by the view that there

is no single dominant theory or paradigm of land use change and development. Accordingly, within each of four substantive sections of this paper, my review organises the commentary by ideas drawn from different contexts and sometimes out of strict historical sequence. The review thus is not aimed at comparing or contrasting various aspects of rural-urban fringes in different regions and countries but to build a case for what a rural-urban fringe and how issues within it can be understood.

Throughout this review of significant theoretical comment, the paper is premised on the idea that rural-urban fringe is not a distinct entity, but one of the parts of an ‘urban organism’ that to a greater extent is subject to the same urbanisation forces that operate in a variety of ways within cities (Starchenko, 2005: 38). These premise allowed for a review of a variety of literature that situates the subject of rural-urban fringe within the broader literature on urbanisation and land use. The review of various literatures was aimed at getting partial insights on different aspects of the rural-urban fringe.

The paper begins by focusing on various characterisations of rural-urban fringe development that are based on spatial considerations. Realisation that spatially-oriented theories do not provide a full explanation of the rural-urban fringe phenomena called for the review of aspatial theoretical perspectives (Briassoulis, 2006: Iaquina and Drescher, 2001). Therefore, insights from neo-classical economics and political economy approaches were reviewed using a broader lens of social theory (Pennock, 2004: 5). Insights from neo-classical economics and political economy approaches were, however, found to be limited in accounting for the role of agency and contingency in rural-urban fringe land uses. Insights from structure and agency perspectives, which attempt to account for the role of agency, were thus reviewed. Insights from structure and agency theory were thus reviewed alongside neo-classical economics and political economy approaches to guide the theorizing dynamics of land use in rural-fringes with each emphasizing different but related aspects.

II. THE RURAL-URBAN FRINGE: SPATIAL DEFINITION AND CHARACTERIZATION

Placing the rural-urban fringe into the context of urban development allows an understanding of the continuous change in the characteristics of this part of the city and, based on that understanding, suggests an approach to defining and delimiting rural-urban fringe areas independent of a particular time or place (Starchenko, 2005: 42).

Collins (1994) observed that the word 'fringe' can be used literally to mean the outside boundary or surface of something; or a part of the city far removed from the centre. When considered as a space the characteristics of the rural-urban fringe become as important as its literal meaning. However, definition and attributes of the rural-urban fringe are not constant but change according to time and place (Masuda and Garvin, 2008: 112; Woods, 2006: 581; Simon *et al.*, 2006: 4-5; Allen, 2003: 135; Spain, 1993).

Despite many attempts to describe the rural-urban fringe, Audirac (1999: 6-8) noted that it remains understudied and has seldom been defined in detail. Thus a quantifiable criterion that one might utilize to identify the fringe into an actual area does not exist. Differences notwithstanding, some agreement over definitions or appropriate terminology to describe the fringe area has emerged. These terms are sometimes used interchangeably to identify quite separate areas that have overlapping characteristics. They include periphery, rural-urban fringe (Pryor, 1968), metropolitan fringe (Daniels and Daniels, 1999; Browder *et al.*, 1995), urban fringe (Bryant *et al.*, 1982), peri-urban areas (Dupont, 2007), peri-urban region (Ford, 1999), rural fringe (Schenk, 1997), peri-urban fringe (Simon, 2008; Swindell, 1988), *desakota*¹ regions (McGee, 1991), and rural-urban interface (Rojas-Caldelas *et al.*, 2008). As a result of this multitude of terms, Thomas (1990: 134) notes that 'confusion in terminology' resulting from various studies is considerable. This difficulty in the way rural-urban fringe is conceptualised and put into use may be a result of entrenched ideologies regarding the nature and processes of urban growth. However, a common thread among them indicates that they are transitional zones or interaction zones, where urban and rural activities are juxtaposed and the landscape features are subject to rapid modifications induced by human activities (Rojas-Caldelas *et al.*, 2008 643; Iaquina and Drescher, 2000).

How far the fringe extends from the city varies considerably, and many commentators on the rural-urban fringe do not provide measured delimitations. The earliest attempts at delineating the rural-urban fringe can be traced to the 13th century B.C., when

[t]he Lord said to Moses ..., command the people of Israel that they give to the Levites ... cities to dwell in; and pasture lands round about the cities. The cities shall be theirs to dwell in, and their pasture lands shall be for their cattle and for their livestock and for all their beasts. The pasture lands of the cities . . . shall reach from the wall of the city outward a thousand cubits all around (Numbers 35: 1-4) (King James version Bible 1974).

There have been many subsequent attempts at defining and delineating the rural-urban fringe. For instance, in trying to differentiate rural from urban land uses, Wehrwein (1942 in Thomas, 1974) described the fringe² as a transition between land which is predominantly for urban uses and the area purposely meant for agriculture.

In an attempt to trace a link between the city and the surrounding areas, Pryor (1968, 204) argued that definitions of the rural-urban fringe should provide a logical link between

theories of urban invasion on one hand and practical techniques for the delineation of the rural-urban fringe boundaries on the other. He categorized fringe areas into two, namely: those that relied upon structural components (such as location and population density) and those that are based on functional components (such as land use and employment). Neither of his categorizations, however, showed a successful integration of components of the rural-urban fringe either with theory or with practical delineation techniques (Starchenko, 2005).

Looking at patterns of land use development within the city and the surrounding areas, Johnson (1974), noted that it was easier to delimit the rural-urban fringe of pre-industrial cities than cities during the industrial period. During the pre-industrial period rural-urban fringes of most cities were secondary to the central city where social, political, and economic power were concentrated. Fringes constituted zones around the edges of cities mostly inhabited by disadvantaged groups. With increased industrial growth, however, more land was required for expansion and this led to the increased rate of industrial land uses at the fringe. Other land uses which are also located at the fringe are those that require no frequent or immediate access by the whole city population. These land uses include waste dump sites, water treatment and storage plants. Johnson continued to observe that the enhanced transport infrastructure and absence of strict planning regulations led to development patterns at the fringe that were dispersed or at low density. This pattern of land use weakened the ties between the fringe and the core of cities as new employment opportunities, shopping centres, and recreational facilities in the rural-urban fringe gave rise to patterns of travel that made the core of the city like any other desirable travel destination.

Considering the relationship between fringe areas and the city centre in defining the rural-urban fringe, the concept of urban field is useful. Friedmann and Miller (1965: 313) described a scale of urban influence that penetrated deep into the periphery, and that made it necessary to change the scale of the spatial consideration of urbanization. Their idea challenged the traditional concepts of the city that did not take into account the relationship of the city core with the surroundings. Friedmann and Miller put forward a concept of 'urban field', where the extent of a region of influence is based on the relationships or functional links between sections within it. Their concept of urban field entailed a continuum of urban influence that starts at the core of the city and disperses outward, though not in a uniform manner, especially as the distance from the core increases.

Coppack (1988: 18) observed that although the urban field concept did not explicitly mention the rural-urban fringe within its framework, it has nevertheless influenced many rural-urban fringe studies. It should, however, be noted that the concept of the urban field was based on a limited set of conditions (it did not include environmental, cultural and political factors) despite its acclaimed universal status. Limitations notwithstanding, concepts such as 'regional cities,' subsequently grew from the 'urban field'.

With regard to regional cities, Starchenko (2005: 23) noted that like the urban field concept, it put forward an idea of a space with multiple functions that possess three main characteristics. The first characteristic is nodes of intensive land use activities

¹ In Malay, *desa* means rural or village and *Kota* refers to a city or town.

²Where the term 'fringe' is used, it is intended to indicate the same meaning as the term 'rural-urban fringe.'

scattered amidst farmland and undeveloped areas. The second characteristic is the relationships amongst the nodes which are in the form of physical flows, such as, of goods and people, and non-physical flows such as of information. The third characteristic is the periodicity of relationships which is made up of different rhythms such as daily, seasonal, and weekly exchanges.

Bryant *et al.*, (1982: 10) observed that regional cities require linkages among various functions. These linkages provide the possibility of access in all directions within the region, though the largest flows are still directed towards the city core. The countryside is important within the regional cities concept as it is considered to be influenced by the social and economic processes of the regional city as a whole.

Bryant *et al.*, (1982: 14) also noted that these linkages can be conceptualized in terms of a continuum between rural hinterland and urban area, divided into several zones of inner and outer fringe zones (see Figure 1; Box 1). The inner fringe is where the transition to urban uses is advanced, while an outer fringe is where rural landscape is dominant. They referred to the outer zone of the city's countryside as the urban shadow and rural hinterland, which has links with or is influenced by the city. The outer zone boundaries are temporal in that they fluctuate

periodically in response to various rhythms of the regional city. In reality, however, according to Starchenko (2005: 23), the continuum of individual zones may merge into each other and make the specific geographic definition difficult. I argue, therefore, that the definition of fringe zones thus need to be inductively developed depending on specific places while identifying several key variables for which threshold values could be categorized.

In an attempt to show why there is an uneven land use development in the rural-urban fringe, Bryant *et al.*, (1982: 14) observed that urban development may not occur around all urban centres in all directions. This, they explained, may be due to constraints and enabling aspects of the physical environment or planning controls and land use regulations. It is also due to variations in societal response to changes within the surrounding areas of a particular city which are not expressed uniformly across geographic space. This makes the rural-urban fringe a discontinuous spatial phenomenon around most cities. Starchenko (2005: 25-26) therefore observed that the regional city concept represents an attempt to anchor the concept of the rural-urban fringe within the general context of urban development, with a link to broader socio-economic processes.

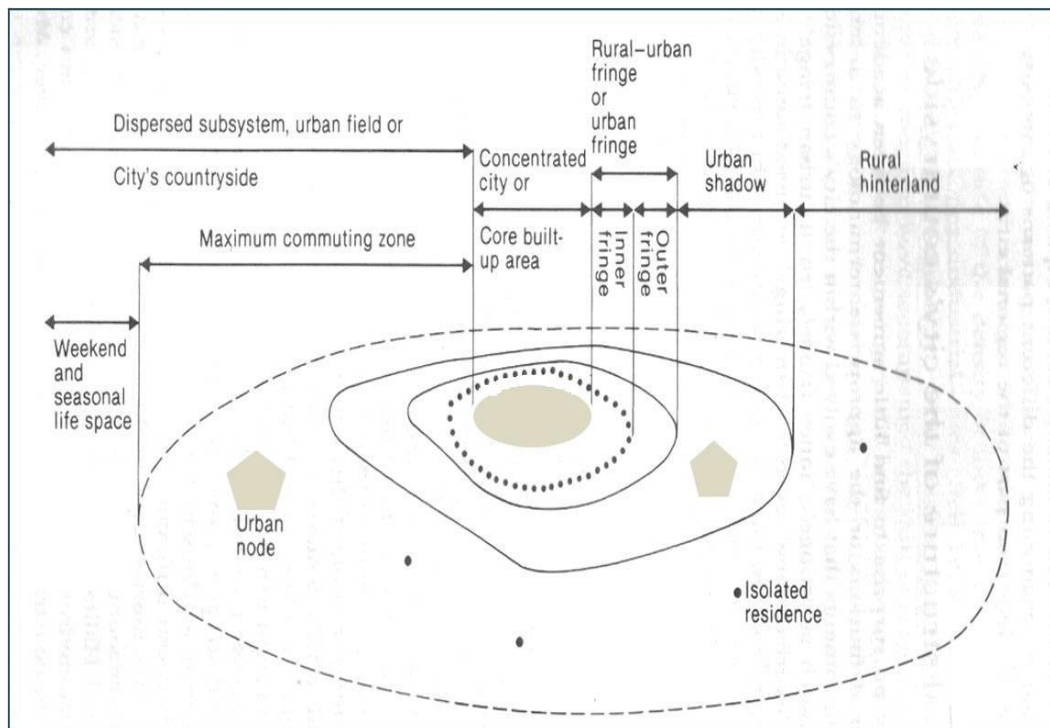


Figure 1: The rural-urban fringe scheme. Source: (Modified from Bryant *et al.*, 1982: 12).

Box 1: Brief explanations of Bryant's model on the rural-urban fringe. Source: (Bryant *et al.*, 1982: 13-14).

Inner fringe is characterized by land in the advanced stages of transition from rural to urban uses, land under construction.

Outer fringe is an area where although rural land uses dominate the landscape, the penetration of urban oriented elements is clear (often single family housing).

Urban shadow is an area where physical evidence of urban influences on the landscape is minimal but metropolitan

influence emerges through the commuting patterns of part-time and hobby farmers and residents of small towns.

Rural hinterland is second homes/recreational uses, extensive agricultural uses and open spaces.

Browder *et al.*, (1995: 312) observed that rural-urban fringes are characterized by diverse land uses, which often vary in relation to their functional linkages to the urban and rural sectors. They are also transitional in nature as they progressively become more agrarian in their orientation as one moves from the

city centre to the rural areas. These areas are highly diverse because they are linked to both urban and rural areas which thus complicate efforts to characterize them. There are however cases where urban growth has engulfed existing rural areas and villages. This 'capture' of rural areas and villages results in progressive replacement of the rural character of the fringe by a more urban character in terms of land use, employment, income and culture (Sindhe, 2006: 193).

While focusing on population and livelihood aspects, Aberra (2006: 119) and Memon (1982: 148) indicated that there are cases where rural migrants move into rural-urban fringes as the first step in a progressive migration towards urban centres. Here rural-urban fringes become transitional spaces or temporary holding locations for new migrants to the urban centres. In yet other cases, new settlements on the rural-urban fringe entail long-time urban dwellers moving to the rural-urban fringe to take advantage of low land rents or to capitalize on new opportunities for land acquisition, speculation and informal enterprise (Briggs and Mwamfupe, 2000; Memon and Lee-Smith, 1993; Memon, 1982: 152-154). Unlike within the city, rural-urban fringes provide residents and entrepreneurs with cheaper housing, more relaxed building and business regulations (Briggs and Mwamfupe, 2000; Memon, 1982: 152, 155). Inconsistent availability of land for urban uses results in 'leapfrogging' of parcels of land thus creating a pattern of scattered or patchy residential development (Bryant *et al.*, 1982: 64, 174).

Adopting multiple perspectives, Masuda and Garvin (2008: 112) and Dupont (2007: 89) indicated that there are many forces that affect land uses in rural-urban fringes. These are social, economic, political and cultural forces operating at macro, meso and micro scale. They include housing and land markets, planning decisions, ownership patterns, land use characteristics, infrastructure and transportation structure and roles of actors within these processes. These forces lead to rapid physical, social and economic transformation in rural-urban fringes which then generate conflicts and opportunities (Douglas, 2008; Mbiba and Huchzermeyer, 2002: 122).

Additionally, there are socio-economic aspects that may be used in characterization of rural-urban fringes. These include high house construction/ownership rate, heterogeneous occupational structure and heterogeneous socio-economic status (Furuseth and Lapping, 1999; Ford, 1999; Daniel and Daniels, 1999: 9). Due to heterogeneous social and economic characteristics of rural-urban fringes, there are bound to be competing land uses and interests. For example, there is a likelihood of smallholders and large landholding farmers, low-income and informal settlers, industrial entrepreneurs and urban middle- and upper-income residents co-existing within the same area but with different and often competing interests, practices and perceptions (Tavernier and Onyango, 2008: 554; Shindhe, 2006: 181; Allen, 2003: 137). Allen (2003: 136) viewed rural-urban fringes as having paradoxical problems in that they can be characterized by lack of 'urbaneness' (such as lack of adequate infrastructure, services and regulations among others), or lack of 'ruraliness', (such as high prices for land, loss of fertile soil and social cohesion, among others).

According to Starchenko (2005: 210) and Allen (2003: 137), uneven development of rural-urban fringes reflects socio-economic characteristics of the residents. Rural-urban fringes of

developed and developing countries show different development characteristics. For example, while the experience of developing countries indicate that most of those occupying this area are engaged in informal economic activities (Memon, 1982: 154), those in developed countries, on the other hand, are mostly from upper and middle income groups (Furuseth and Lapping, 1999; Daniels and Daniels, 1999: 9).

In regard to developing countries several authors (Rojas-Caldelas, 2008; Allen, 2006; Aguilar and Ward, 2003; Mattingly, 1999; Adell, 1999; Browder *et al.*, 1995; Memon, 1982) have used different phrases to describe conditions of rural-urban fringe settlements which include, but are not limited to: agglomerations of poverty; metropolitan village; belts of misery; informal settlements; spontaneous and low-income settlement; slums of despair, among others. The main theme of these phrases is that people living in these areas have rural roots, are engaged in informal economic activities and have less effective services and facilities compared to those available at the city centres. Although urban development in these countries may show some common characteristics, there are however some differences. Differences are a result of historical, legal, cultural and social backgrounds of different countries and regions within countries.

Starchenko (2005: 38) advises that, while definitions of rural-urban fringes should ideally be based on parameters that are unique to different areas and that are likely to remain constant over time, this is impossible due to constant changes in rural-urban fringe experience. These constant changes render any set of defining parameters quickly outmoded (Dangalle and Narman, 2006: 165). Mbiba and Huchzermeyer (2002: 123) also observed that there is no single spatial definition of the rural-urban fringe across the world and/or even for any single city. As such any definition would have to be specific to some interests (depending on some pertinent issues or for specific purposes) with precise criteria.

Starchenko (2005: 38) explained that an approach that is inclusive and flexible is thus required in order to resolve this situation, taking into account that a rural-urban fringe is an abstraction of reality and therefore there are no universally applicable definitions or boundaries, only shifting definitions and shifting phenomena. He considers that a number of dimensions can be used in developing definitions in each case under consideration. He further argued that these dimensions may include but are not limited to environment, settlement patterns, land values, nature of land use, demographic, social, economic, administrative, political, and infrastructure supply, among others. Spatial delimitations can however help in highlighting and describing what a researcher deems to be key components in relation to the research at hand (Mbiba and Huchzermeyer, 2002: 123). In delimiting a rural-urban fringe, Simon *et al.*, (2004: 247), argue that:

In terms of present-day qualitative and post-structural approaches to research, empirical measurement and identification of specific distances and areas corresponding to such labels (urban and rural) is not seen as important. This is extremely difficult to do in practice, has limited use and is subject to rapid change in such dynamic conditions.

III. INFLUENCES ON LAND USE: INSIGHTS FROM NEO-CLASSICAL ECONOMIC THEORIES

Weintraub (1993) explains that, neo-classical economic theories focus on the determination of prices, outputs, and income distributions in markets through supply and demand, mediated through economic 'agents,' either households or firms. In Weintraub's view, agents are thought of as being characterised by having unlimited desires and wants which exist amidst various constraints or scarcities. Tensions or the decision problems emanating from competing desire and wants are assumed to be worked out through market mechanisms or forces. Prices are taken as the signals that tell households or firms whether their conflicting desires can be/have been reconciled.

According to Pennock (2004: 9), the neo-classical paradigm on urban land use is based on the assumption that urbanisation is a result of cumulative actions of individual households and firms within a particular locality. These actions materialize into demand for land. In theory, demand for land results in particular land uses which reflect profit making potential for each location/site relative to all other locations. For this demand to be met there is a need for a free market that operates in an economically rational way. Factors such as labour supply, location of land use, cost of transportation and availability of natural resources are considered to be important components of neo-classical economic approaches (Gottdiener, 1994).

Alonso (1960) provided one of the earliest applications of neo-classical economic approaches to study urban land use. His model assumed that firms and individuals were rational actors in an urban land market. He supported his assumptions by describing a land bid-rent curve, whereby the location of a particular land use within an urban area was determined by the bid-rent curve. This was because the bid-rent curve was thought to represent profit maximization potential for firms or satisfaction maximization for residents (Alonso and Joint Center for Urban Studies, 1964). Alonso's model was based on numerous assumptions such as existence and availability of perfect knowledge and information as pertaining to land markets and perfect transportation access, while discounting other non-economic factors that are likely to influence urban land use (Pennock, 2004: 10).

Pennock (2004: 10) observed that the assumption of economic rational land use allocation discounts the role of government which is seen to be unnecessary or even undesirable. There is, however, an appreciation that there is a likelihood of short-term inefficiencies and externalities in land use, but (over time) it is held that the market as a self-regulating and equilibrium seeking system resolves these problems.

Logan and Molotch (2007: 9) noted that the assumption that markets allocate properly and that users, buyers, and sellers have optimal information, holds true to some extent. However, the rationality of actors regarding their use of land is determined by various factors. Land markets are far from being perfect because a number of actors, at any point in time, are limited and land market is rife with speculation based on prices. The approach also fails to account for such factors as social, cultural, personal and political inequalities (Davis, 1991: 57) which have the potential to affect the use to which land may be put into or access to information and other resources necessary in meaningful market situations. They further observe that markets are not

ordered by impersonal laws of supply and demand but are a result of cultures which are bound up with various interests. Land markets, thus, work through such interests and institutions that they are derived from. These forces organize how land markets work, what prices will be paid/received, as well as behavioural responses to prices. Another problem with a purely economic approach is that information on land prices and its determinants is very difficult to find.

Chicoine (1981) further observed that physical characteristics of the land parcel and the economic value of it may influence land use. Physical characteristics, such as size of plots, topography, arability, structural improvement and natural resources, influence other uses of land such as agriculture, recreation, residential or commercial development and may raise the land's value (Nelson, 1992: 138). In some cases certain features such as slopes or wetlands may make certain uses difficult or illegal under environmental and planning legislation. It is a case of physical features of land intersecting with public policies and regulation to shape peoples' actions on land.

Mbiba and Huchzermeyer (2002: 124) agree that neo-classical approaches assume an existence of a perfectly equal and homogenous land character and also note that it omits any consideration of non-material values (Logan and Molotch, 2007: 1-4) such as customary ties to the inherited land. Furthermore, it does not consider land markets in 'pre-capitalist societies' where land use is based on customary laws (Zein-Elabdin, 2009: 1158; Rakodi, 2005: 5). In this case, land use changes are not ordered by the 'formal' markets or 'Western style' individual land title. Berner (2001: 6) noted that:

... market expansion [is] incomplete even in the most advanced societies. Economic activities within households (and sometimes communities) neither follow the logic of the market, nor are they regulated by the State. There is no monetary remuneration, and entitlements are defined and governed by personal relations rather than property rights.

Pennock (2004: 9) observed that although neo-classical economics approaches are contested by a variety of critical theories, particularly those derived from political economy, their perspectives have been applied to the study of urban land use and with time have become interwoven into the fabric of urban research such that they have almost become hegemonic. They have formed a huge part of the ideological structure that has been used as a guide to assist in understanding and explaining urban growth.

IV. INFLUENCES ON LAND USE: INSIGHTS FROM POLITICAL ECONOMY THEORIES

Pennock (2004: 11) argued that because land markets are based on private property and voluntary exchange for private gain, for markets to function optimally, great intervention is needed to manage these arrangements. Thus the role of government in ordering land markets cannot be easily discounted. For instance, government intervenes in diverse ways (such as, through sectoral policies, or as a development intermediary) in order to safeguard particular interests and values. Protection of the environment is one such example where such interventions are needed. This intervention calls for an approach that focuses on the role of the State in regulating land

uses and land markets. Such an approach may reinforce a gap in understanding why some land uses occur and not others, one of inadequacies of neo-classical economic approaches. There is a need to explore beyond outward appearances and events of land uses, to actual mechanisms that produce such land uses. Specifically, neo-classical approaches (and also political economy) do not directly address the issue of human agency³, and in most cases human agency is absorbed as part of assumptions within theoretical parameters in analyses (Healey and Barrett, 1990: 92).

The political economy approach to land use attempts to address shortcomings of neo-classical economics by including the issue of government in land markets. It advocates an integrated and relational approach to understanding the interconnectedness of economic, political, social and ecological processes that work together to produce uneven urban (rural-urban fringes) land use distribution (Swyngedouw and Heynen, 2003: 902).

Different forces and processes influence land use behaviour/activities in the rural-urban fringe (Logan and Molotch, 2007: 1-4). One way to understand these forces and processes in a locality is to focus on the interaction between activities and people, and between the locality and the external environment (Liffmann *et al.*, 2000: 363, 369). This allows the linking of human activities within systems of exchange or interaction which include economic, social, political, regional, national and even biophysical aspects (Logan and Molotch, 2007: 20; Bryant, 1995: 257).

One set of relations that calls for further attention is the interaction between the government and the land market, including government's efforts to manage land development, influence land use and protect natural resources. Through time, state intervention constrains the use to which land can be put and therefore affects its uses. It is however argued that it is necessary for government to be involved in the land market to safeguard public interests (Watson, 2008: 231-232; Bryant, 1995; Peterson, 1991: 15; de Soto, 1989: 183).

Liffmann *et al.*, (2000: 369) indicated that in managing land uses, different governments have come up with a range of public policies and regulations. These include zoning, subdivision and environmental regulations that aim at regulating or influencing land use decisions of private landholders. These regulations constrain landholders' options for the use of land, and thus influence present and future market values of land. Government policies that promote infrastructural development (such as construction of roads, highways, municipal sewers and water supply) may also influence the use of land. In addition, policies such as those related to land rates and taxes influence landholders' financial calculations and therefore influence the way they use land (Maconachie, 2007: 12; Logan and Molotch, 2007: 23; Hart, 1991a; Hart 1991b).

Property rights also influence the way land is put to use. Where land rights guarantee long-term tenure to a particular parcel of land, landholders may decide to use such land for a longer time without selling it. This may be contrasted with short-term tenure which may make landholders avoid long-term

commitment to the land (Cavailles and Wavresky, 2003: 344; Raymond, 1997).

Land uses are also characterised by societal competition which support an argument that they are socially produced. The social production of land uses is embedded within the structure of the overall system of production and consumption, which are the outcomes of societal organisation (Logan and Molotch, 2007: 12; Gottdiener, 1985; Massey and Catalano, 1978: 22). In such a competitive environment, inequalities are reproduced at all societal land use levels including city, rural areas, and rural-urban fringes (Simon, 2008: 15; Mbiba and Huchzermeyer, 2002: 124).

Mbiba and Huchzermeyer (2002: 125) argued that in rural-urban fringes, rapid urban growth and land commercialisation impinge on livelihoods of local households and institutions. This creates a condition that threatens the wellbeing of actors in these areas (Logan and Molotch, 2007: 1-2, 20, 23; Plantinga *et al.*, 2002: 561; Liffmann *et al.*, 2000: 363, 369; Davis, 1991: 57). Compared to a good number of city residents and institutions, the rural-urban fringe residents are under-resourced with respect to knowledge and skills to effectively participate in the emerging urbanised local economy. This is largely attributed to persistent structural inequalities (due to what Lipton (1977) calls urban bias in development) and inadequate decentralisation of national resources to local levels. This has produced social phenomena such as proletarianization, squatter settlements and poverty when the unprepared local actors are faced with city-wide forces. Under such conditions, actors' capacities to cope and adopt are limited and this leads to few local (and non-local) individuals and institutions dominating the local production systems (Binns and Maconachie, 2006: 217; Bryant, 1995; Simon *et al.* 2004: 243). The process of peasants' dis-enfranchisement by city-based forces is akin to unequal global economic relations being played at the international levels with the exception that at the local level, the forces are either direct or indirectly mediated through governmental operations.

Global forces influence costs of agricultural production and prices of local produce (Logan and Molotch, 2007: 256). Under traditional farming systems, agriculture is local as much of it is bound to local practices of landholders who are attempting to make the best out of their land under prevailing local conditions. However, while land is not internationally mobile, some inputs (e.g. seed, fertilizer, animal feed), outputs and knowledge related to agriculture are very mobile, even in a global sense. The use of agricultural land is also not just for economic purposes but it is bound with historical conditions and cultural systems. Thus, opening it up to the global economy has far-reaching implications for the cultural transformation of the local actors. Globalisation⁴ enforces increased competition for places of production and consumption, the consequence of which is pressure on local institutional arrangements as local people try to adjust to changing conditions (Simon, 2008; Maconachie, 2007; Arabindoo, 2005; Bryant, 1995; Braun, 2002).

³Agency is defined as "the actions and motives of human actors in the practice of social conduct" (Gregory, 2000: 349).

⁴Globalisation "...is a process by which the experience of everyday life, marked by the diffusion of commodities and ideas, is becoming standardized around the world" (Braun, 2002).

In some contexts, globalization may foster decentralisation in political, administrative and fiscal powers and thus facilitate the local empowerment (through local management of public goods) and economic independence. However, the (envisaged) empowered, diverse and culturally rich local communities may not arise automatically without broad political support. Instead it may result in dualism, where one part of the community enjoys benefits of globalisation (through their ability to adjust their agricultural production systems to serve global markets e.g. export flower farming in rural-urban fringes) while the other part of the community remains marginalized and subsistence-oriented in their agricultural production (Braun, 2002).

Mbiba and Huchzermeyer (2002: 125) indicated that when the local economy is 'captured' for the production of raw goods and materials for global markets (e.g. coffee, tea or flowers), its capacity and capability to support local basic needs is diminished/alterd. Local livelihood systems especially those that support poor households (who are usually weak and unprepared) are weakened or lost. Local institutions are also overwhelmed by the entry of more powerful actors than the local structure and capacity can handle. This leads to further marginalisation of the local people, who in many cases are indigenous farmers, and the weakening of local institutions. When this happens, breakdown in land use governance and administration is likely to take place. Breakdown in local institutions leads to corruption and other self-seeking incidences which further lead to marginalisation of the indigenous actors. This further hinders them from actively taking part in new economic opportunities. Where social and economic conditions, such as local employment, income, population growth and national economic trends are favourable, landholders can pursue various options to achieve certain life goals. The existence of alternative opportunities can thus enable them to make diverse social and economic choices, thereby influencing their engagements with the land as a source of livelihood (Simon, 2008: 11; Dayaratne and Samarawickrama, 2003: 102).

Bryant (1995: 257) observed that on the macro scale, "...there are forces that link economic activities in the rural-urban fringe to systems of exchange nationally and internationally..." And that these forces are also partly responsible for the changing relationship between the rural-urban fringe and the city. For example, in different rural-urban fringes, there may be dairy and horticultural farms that have links with cities and international markets. In understanding dynamics of such production systems, a broader focus that includes global markets and policies is thus needed. In most cases local production activities and decisions are influenced by global forces that barely take into account local circumstances (such as need for local food production and customary land use and ownership), though they affect local conditions of production (Mbiba and Huchzermeyer, 2002: 125).

Promotion of neoliberal policies by the World Bank and International Monetary Fund (IMF) and the pressure on developing countries to adopt an enabling and facilitative approach to housing (instead of mass provision) has given rise to policies that indicated the growing acceptance of different forms of self-housing in most developing countries (UN-Habitat, 2003: 43; Briggs and Yeboah, 2001: 21). These led to a shift in policies dealing with informal housing in different countries. However,

access to land for housing, especially in cities remains a problem. Uncertainty in systems of land availability and governance within many cities (especially in developing countries) has led many residents to seek construction land in rural-urban fringes (Pacione, 2005; Potts, 2004; Home and Lim, 2004 1; UN-Habitat, 2003: 46).

Furthermore, the adoption of neo-liberal policies affected smallholder farming production as a result of reduced government spending on agricultural extension services. Maconachie (2007: 11) observed that reduced government support for smallholder farming in many countries where neo-liberal policies in form of Structural Adjustment Programmes were implemented led to reduced farm productivity. This further weakened smallholders' capacities and thus constrained their coping mechanisms and transition to other land development alternatives.

Cheru (2005: 6) observed that when a local production system (such as smallholding farming) is weakened, it becomes marginalized from the mainstream of national development. Low levels of agricultural production, coupled with lack of non-farm employment opportunities and the absence of vibrant small and medium-size urban centres (to facilitate interaction between rural areas and major cities) and disparities in the level of services provided collectively accentuate the abandonment of farming by people who move to primate cities.

Effects of the exodus to primate cities are also felt throughout the metropolitan system of many developing countries (Pacione, 2009: 120; UN-Habitat, 2005: 4; Briggs and Yeboah, 2001: 23). These migration forces are producing regional or meso effects (trade policies, regional economic integration, legal framework, transportation policies among others). These forces are mostly manifested in the form of population expansion and spread of residential development in former farmlands. The forces also underlie processes that are linked to unequal economic and living conditions between rural-urban fringes and the cities (Bryant, 1995: 258).

V. TOWARDS A LOCALISED CONCEPTUAL APPROACH

Lambin *et al.*, (2001: 266) observed that political economic explanations of a rural urban fringe focus on differential power and access, enforced by dominant social structures. Explanations tend to assume that capitalist-based structures (above all others) exacerbate differences in power and access, and hence land use changes. Changes resulting from non-capitalist structures are dismissed or taken as part of explanatory assumptions (Zein-Elabdin, 2009: 1158). For example, one non-capitalist contributor to land use change in rural-urban fringes is the actor's agency (Mbiba and Huchzermeyer, 2002: 126) which, although relatively neglected, may have a great influence on land use and the process of land conversion.

A focus on local actors in societies (such as those in developing countries) where both pre-capitalist (traditional) and capitalist (modern) systems operate may allow us to see how structural forces from globalization and socio-cultural influences circumscribe the agency of actors, thus highly affecting their life choices (Bryant, 1995; Mbiba and Huchzermeyer, 2002: 124). Such an approach may also show how actors manoeuvre through various constraints to come up with strategies for their day to day

living: that is, how actors meet their life needs or solve their problems amidst lack or inadequate provision by formally or officially sanctioned bodies or organisations (Rakodi, 2005: 5).

A conceptual approach that provides a framework on which to base an understanding of the agency (alongside explanations of how actors use agency to challenge or reinforce the existing structures that affect their use of land) is thus needed. Such an approach can help to reveal ways in which land for urban development is used and known, while challenging the unacknowledged and acknowledged assumptions at the heart of land use planning discourses that are insensitive to meanings and values in practices of non-dominant cultures (Harrison, 2006). Such an approach reasserts the importance of historical and contemporary voices through a reconstruction of history and knowledge production (Zein-Elabdin, 2009: 1155; McEwan, 2002: 127-128). The approach may also seek to capture voices and actions which are usually ignored in dominant varieties of space production narratives. These ignored voices and actions are also referred to as 'subaltern voices or actions' (Sharp, 2009: 115; Yeboah, 2006: 51, 61; McEwan, 2002: 127-131; Spivak, 2000: xxi; Spivak, 1988: 298). Through actors' actions (as evidence of their agency) there can emerge a possible way of identifying culturally appropriate ways of infrastructure and services provision in situations where formal provisions by local/central governments are inadequate. This (agency) would also give information on ways landholders are able to manoeuvre to accommodate changes in their local environment.

Given the reduced presence of the government in management of day-to-day affairs of the society and the economy (in part due to effects related to Structural Adjustment Policies (SAPs) especially developing countries) local actors have assumed a major responsibility for managing different aspects in their localities (UN-Habitat, 2009: 26; Simon, 2008; Bryant, 1995: 258; Potts, 2004). In such cases, land use planning ideals and methods (required and advocated by governments) are no longer accepted or supported by the majority of actors (Batley and Larbi, 2004: 9). Simon (1997: 190) observed that reduced central/local government influences lead to, ...individuals and groups of people at a local level ... seeking the attainment of their aspirations for better living standards outside the realm of State.

Many countries particularly developing countries (especially in Africa and Latin America) with a colonial legacies have weak central/local government institutions. Therefore changes taking place are not just on land use but also political, cultural and social as well. The process of transition from 'traditional' (indigenous) to 'modern' systems is however not clear-cut; it is on-going and characterised by a systems mix (Zein-Elabdin, 2009: 1155; Sharp, 2009: 135; Maeda, 2009: 345; Harrison, 2006; Sandercock, 2004). The strategies emanating from such processes are thus hybrids of both traditional and modern livelihood strategies. Simon (1997: 192) and Nabudere (1997: 214) however argued that many of the hybrids strategies are not postcolonial but are rather post-traditional because they embody

... indigenous values, social structures and identities that survived –admittedly to differing extents and with differing degree of engagement with or transformation by colonial impositions (Simon, 1997: 192).

The resultant hybrid strategies empower the actors in the articulation of their experiences and also in their engagement with social, economic and environmental transformation. These strategies work in complex and sometimes covert ways, mostly in contradiction to the prevailing official social and economic channels (Harrison, 2006; Bryant, 1995; Young, 2003: 79). Hybrid formations are however not uniform as they differ in distribution and practice within a particular locality and even among actors (Yeboah, 2005: 61; Sandercock, 2004). These formations (or hybridity) involve processes of interaction that create new social spaces to which new meanings are given within specific situations and localities (Young, 2003: 79).

Following from the above understanding on hybridity, a focus on the local actors thus provides a good basis for locating the spaces of hybrid formations (Yeboah, 2005: 61; Harrison, 2006). Localised actions are thus significant in understanding aspects of land use and change. Therefore, a look at actors and specifically at the aspects of structure and agency can reveal how people make choices within locally variable social, economic, environmental and cultural conditions (Bryant, 1995). Such an approach may also allow us to understand how innovations may be introduced and adopted in certain areas and not in others. In addition, it may lead to understanding why people continue to follow socially and environmentally destructive paths, despite evidence of the damage to their locality. The actions may be explained using Simon's (1997: 190) words:

...they are seeking the basic needs... but have despaired of the ability of the State and official development agenda to deliver on their promises and have thus taken their own initiatives.

In understanding land conversions, it is thus worth appreciating that locally constituted conditions are critical in influencing land use change (Bryant, 1995: 258; Bryant *et al.*, 1982: 59) at the micro level. However, it is at this level that there are tendencies to see individual and local actors as reactive and as such following or being led by macro and meso scale forces and processes (Bryant, 1995: 258). These tendencies are partly theoretical positions that underpin the literature catalogued above (from neoclassical economics and political economy perspectives) which generally "...ascribe a relatively passive level or reactive role to local community involvement..." (Bryant, 1995: 258) in land use decisions. For example, while conceptualizing meso scale change in the rural-urban fringe, the focus is put more on the effects of the influences emanating from the city core than on the locally-based influences (Bryant, 1995: 258). In such cases land use changes are usually represented in the form of external pressures and influences without a clear consideration of internal influences (Plantinga *et al.*, 2002: 561). Such influences include environmental, familial, societal, and cultural diversity and the existing settlement structure within the rural-urban fringe. Such representations thus miss out on complex realities that characterise land use in the rural-urban fringe and the individual actor's capacity to choose (or circumvent) between macro and meso processes (Bryant, 1995). Therefore, structuration theory (structure and agency approach) is relevant as adds insights into the understanding of the actors and the shifting nature of their agency.

4.1 Insights from structure and agency approach

Long and Long (1992: 21) noted that actors process information and strategize in their dealings with one another and are active participants in their social worlds. Actors may be either institutions or individuals. Furthermore, actors attempt to solve problems, and learn how to intervene in the flow of events around them, while also continuously monitoring their own actions, observing how others react to their behaviour and taking note of various contingent circumstances (Bernstein, 1989: 26). Commenting on the ability of actors to monitor their activities and those of others, Giddens (1984: 29) observed that: Human actors are not only able to monitor their activities and those of others in the regularity of day-to-day conduct; they are also able to 'monitor that monitoring' in discursive consciousness. 'Interpretative schemes' are modes of typification incorporated within actors' stock of knowledge, applied reflexively in the sustaining communication. The stocks of knowledge which actors draw [upon] in the production and reproduction of interaction are the same as those whereby they are able to make accounts, offer reasons, etc.

Vanclay (1995: 111) and Davis (1991: 57) observed that although social, economic, environmental and cultural structures may promote or constrain certain values (for instance about land), actors are able to manoeuvre and act on their decisions to generate new forms of values (in the case of this paper, land uses). This can occur even in situations of severe restrictions/limitations but whereby individuals can still make choices among options or actions. This leads to the notion of *agency* which attributes to the individual actors the capacity to process social experience and devise ways of coping with life.

According to Giddens (1984: 4), the power of actors to act is grounded in human consciousness, which exists in three levels (Figure 2). First of these levels is the discursive consciousness which is the level at which humans can express their thoughts, emotions and reasons for actions. That is, it is that which they are able to say or to give verbal expression concerning social conditions, including conditions of their own action. Here there exists a conscious awareness of procedures and rules guiding a particular action. The level thus comprises of the knowledge of how to do things or to live, and whereby social agents can explain the reasons for their actions and intentions.

The second level is the practical consciousness level which consists of extensive knowledge about life by actors on how to survive in their environment, how to cooperate, compete, cope and get things done. It is based on what they know or believe about particular conditions but cannot express discursively (Giddens, 1990: 301; Giddens, 1984: 6-7). Here social agents are tacitly aware of the reasons for their actions, and therefore it is at this level where application of basic skills (common sense skills) necessary for handling daily existence operates. It is routinized into humans' daily existence and involves little if any motivation or concentration to access/apply, though when social agents are pressed to account for their actions, they can give explanations pertaining to them. The knowledge and skills at practical consciousness level is mutually shared with other members of a particular group or society and, are essential for the execution of social life (Emirbayer and Mische, 1998: 963-964; Thompson, 1989: 59). However, (Giddens, 1988: 58) observed that:

More important are the grey areas of practical consciousness that exist in the relation between the rationalisation of action and

actors' stocks of knowledge; and between the rationalisation of action and the unconscious. The stocks of knowledge, in Schutz's term, or what I call mutual knowledge employed by actors in the production of social encounters, are not usually known to those actors in an explicitly codified form: the practical character of such knowledge conforms to the Wittgensteinian formulation of knowing a rule.

In both discursive and practical consciousness levels, humans can explain the intentions and reasons for their actions. These levels can interpenetrate each other and thus their distinction is fluid and can be altered by many aspects such as socialization and experience. The unconscious level is not accessible by discursive consciousness. It is the level where life histories, knowledge of experiences, emotions and thoughts are usually filed from the immediate conscious recall, especially during daily discussions (Tucker, 1998: 81; Giddens, 1984: 375).

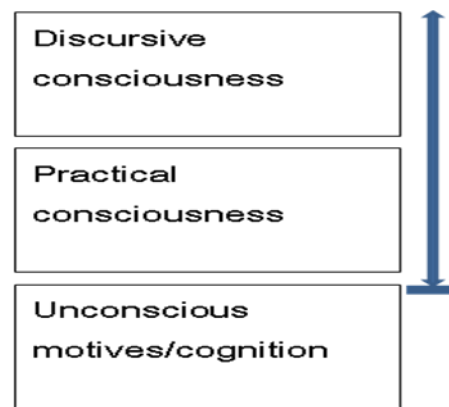


Figure 2: Relationship between discursive consciousness, practical consciousness and unconscious motives/cognition.

Source: (*Modified from Giddens, 1984: 7*).

Social agents/humans, draw upon these three layers of consciousness, which can be described by a stratification model (see Figure 2) of human actions (Craib, 1992: 40). The stratification model according to Thompson (1989: 59) and Giddens (1984: 6, 376) comprises of three moments: first, is the motivation of action which is derived from unconscious and which is important for overall plans and situations which sometimes break with the routines of life; secondly, there is rationalization of actions derived from practical consciousness and thirdly, through reflexive monitoring of actions. Giddens further observed that there exists a repression in form of unconscious motivations and which creates a barrier that affects the discursive consciousness and the unconsciousness. It is the existence of this barrier that leads to a rejection of the notion of the very existence of unconscious motivation (Tucker, 1998: 81; Cohen, 1989: 51-52).

Giddens (1993) made a point that people act with knowledge, skill and intention, and that their motivation has a structure which responds to their needs/wants at any given time in life. In arguing against the notion of existence of unconscious motivations, Giddens noted that infants are not born with the capacity to meet their own needs, though they possess them (needs), and these must be met by others. Meeting of their (infant) needs is further extended to mediation and guidance of them (infants) in/with the social world. This mediation and

guidance is meant to align the wants of infants with demands and expectations of the wider society. This is how human actors are grounded into reciprocal social relations with others within their environment. The statement below affirms this grounding of individual actors in a set of social relations. Giddens (1993: 124) stated that given,

...the modes of management of organic wants represents the first, and in an important sense the most all-embracing, accommodation which the child makes to the world, it seems legitimate to suppose that a 'basic security system' – that is, a primitive level of management of tensions rooted in organic needs – remains central to later personality development; and given that these processes occur first of all before the child acquires the linguistic skills necessary to monitor its learning consciously.

The initial level of human needs thus becomes the core influence in the development of future human personality, with the major need being the basic security system, which is largely inaccessible to our consciousness (Cohen, 1989: 51). Maintenance of this security system thus becomes a pre-occupation of each social actor (e.g. the landholder) through an ongoing involvement with the social world. Because the environment in which people live is not secure and predictable, the basic security or ontological security⁵ drives human motivation (Giddens, 1993: 123-124; Craib, 1992: 38; Cohen, 1989: 53).

Giddens (1989: 278) observed that access to (or existence of) basic security allows individuals to develop their full potential within uncertain or unpredictable localities. For example, responses to rapidly changing land uses in a rural-urban fringe may reflect a need for some form of nurturing a source of livelihood (land) in an environment full of uncertainties. Lack of nurturing or inconsistent nurturing produces tensions in (or damage to) sources of livelihood (Craib, 1992: 39). To reduce the tension or the damage, landholders are continuously searching for ways to enhance this security in their surroundings, albeit in rapidly changing and unpredictable conditions. Also, in their day to day encounters, landholders always face potential risk to their livelihood. To further ground their security and minimize their risk, individuals cooperate through the use of tact and trust as a society or community. This allows people to enhance their position and knowledge of how to access and maintain their livelihood (Davis, 1991: 57; Held and Thompson, 1989: 9).

As a result of individuals' cooperation, a system of social practices that forms the social system (systems⁶) is created (Craib, 1992: 40; Held and Thompson, 1989: 10). The drive for cooperation among people is meant to achieve self identity and personal security in their lives, and is manifested through routinized predictable actions (Gregory, 1989: 197), such as becoming a member of religious groups, merry-go-round groups,

vigilante groups etc. Actions by individuals form part of societal structures (Vanclay, 1995: 114; Thompson, 1989: 73). When such social practices are continued over time, people master them as a way of living in unpredictable and changing conditions (Emirbayer and Mische, 1998: 1006-1007; Giddens, 1990: 301), thus further replacing (though sometimes gradually) previous social relations that supported their livelihood.

Giddens (1984: 29) observed that mastering of skills involves possession of the ability to handle unfolding challenges and tensions in an ongoing manner. With time, mastered skills become a sort of mutual knowledge among people (community) in a locality which consists of rules⁷ of legitimation and signification (c.f. Tucker, 1998: 83; Craib, 1992: 45). These rules are meant to reduce possibilities of losses for each individual. Rules of legitimation provide a rationale through which actions are sanctioned as an acceptable form of behaviour among individuals. That is, legitimation provides morality in form of shared sets of values and ideals, normative rules, mutual rights and moral obligations. For example, it may be acceptable for landholders in a rural-urban fringe to sell small parcels of land and move out to more rural areas to buy bigger parcels of land, or to sell portions of their land and leave intact a space where there is graveyard. On the other hand, rules of signification enable the effective communication of meanings on various behavioural tendencies. For example, landholders in a rural-urban fringe may use various arguments, such as the decline of income from coffee, to justify land sale and its conversion for residential purposes, even if they did not use land to cultivate coffee previously. According to Giddens (1984: 29):

The communication of meaning, as with all aspects of the contextuality of action, does not have to be seen merely as happening 'in' time-space. Agents routinely incorporate temporal and spatial features of encounters in the process of meaning constitution. Communication, as a general element of interaction, is a more inclusive concept than communicative intent (i.e. what an actor 'means' to say or do).

Rules of legitimation and signification are embedded in individuals' life in such way that in most cases they can only tacitly be understood, with and their explanation at best being an interpretative prediction (Pennock, 2004: 21). Giddens (1984) noted that regularized social practices once they are embedded in life become institutionalized. This institutionalization of routinized social practices comes as a result of their recognisability and acceptability by the collective membership of the society and also when they are reproduced over a considerable period. Every act of reproducing the rules thus also reproduces the structure of the social institution and its context, thereby reinforcing mutual knowledge among individuals. Therefore, human need for ontological security leads to the repeat of routine patterns of behaviour that unintentionally reproduce existing structures. Other than just reproducing social structures, individuals also through their practices reproduce the social system (Saunders, 1989: 225).

⁵This kind of security entails the confidence or trust that the natural and social worlds, including the self and social identity, are as they appear to be. It is because of ontological security that actors are more likely to re-produce known or dominant structures than they are to create new structures (Giddens, 1984: 50, 375).

⁶According to Moos and Dear (1986), systems are regularised social practices situated in time and space. They also argued that systems that are "deeply embedded" parts of life are called institutions and have no reality or existence separate from the action of the people.

⁷Rules guide regularized behaviours that are implicitly acknowledged as being appropriate and enable people to manage their daily lives and understand the world around them (Giddens, 1984: 21-23).

Pennock (2004: 21) observed that there are however some times when the process of reproduction is by-passed and instead power and domination are used to alter social events in a way that is transformational. Allocative and authoritative resources are used to effect such changes (Craib, 1992: 47). Allocative resources include command over objects, goods or material phenomena that are used to enhance and maintain power. For example, city-based land seekers, with more money than indigenous local residents are likely to bid up land prices rise to a level where continued farming is not justifiable economically. On the other hand, authoritative resources include command over people and are meant to gain control over others (Cohen, 1989: 28). For example, indigenous residents in the rural-urban fringe may invoke customary regulations and social norms in dealing with land uses and security matters even in relations with the newcomers who do not subscribe to such norms and practices.

Pennock (2004: 21) added that rules of legitimation and signification are needed to access and use both of the above resources (allocative and authoritative) and that these resources are unevenly distributed within society as some actors have more resources and power than others. However, even those with little power have some influence on those with greater power and resources. As a result, individuals live within limits of resources, having skills and knowledge of the broader social conditions that may be influencing their locality (given that each individual possess some room for manoeuvre). Agency then arises from the individual's understanding of rules and capacity to utilize resources (Giddens, 1989: 253; Giddens, 1984: 33, 74).

4.2 The agency/structure interface

Social relations take place within structures, institutions and cultural conditions that have links at micro and macro levels (Vanclay, 1995: 114; Long and Long, 1992). In an attempt to bridge the gap between macro and micro, subjective and objective, actor and structure, Giddens introduces a structuration approach (c.f. Tucker, 1998: 11; Vanclay, 1995: 119; Giddens, 1991: 204; Giddens, 1984: 29). The process of structuration is however difficult to observe especially at empirical level (Starchenko, 2005: 83; Flyvbjerg, 2004: 299, 300; Gregson, 1989: 240, 246). To address this obstacle, Starchenko (2005: 83) advises that adopting Giddens' concept of bracketing, becomes helpful (c.f. Cohen, 1990: 43; Giddens, 1984: 288). The notion of bracketing holds that, neither actor nor system is placed "... in a superior position in analysis, but rather integrates both areas of concern even though the focus may be on one or the other" (Starchenko, 2005: 83).

The primary concept of the theory of structuration is the duality of a structure and agency (Tucker, 1998: 12; Craib, 1992: 33-34; Giddens, 1991: 204; Giddens, 1989: 253; Cohen, 1989: 10), that is "the rules and resources drawn upon in the production and reproduction of social action are at the same time the means of system reproduction" (Giddens, 1984: 19). Human actions are therefore assumed as being able to reproduce and transform themselves. According to Giddens (1984: 2):

Human social activities, like some self-reproducing items in nature, are recursive. That's to say, they are not brought into being by social actors but [are] continually recreated by them via the very means whereby they express themselves as actors. In

and through their activities [actors] reproduce the conditions that make these activities possible.

Giddens (1991: 204) noted that depending on events and circumstances, individuals within the society can draw power and resources to alter potential⁸ outcomes and therefore bring them (social outcomes) under control. Because of the duality of societal structures, empirical observation of the social system is possible (through bracketing) as they are linked and bounded in social practices across space and time. Therefore social practices not only influence structure but also constitute and reproduce the structure. This proceeds in a continuous manner, as structures can be changed (reproduced) when knowledgeable human actors put their knowledge, resources and power into practice. Giddens (1984: 25) averred that:

Structure is not 'external' to individuals: as memory traces, and as instantiated in social practices, it is in [a] certain sense more 'internal' than exterior to their activities... Structure is not to be equated with constraints but is always both constraining and enabling. This of course does not prevent the structured properties of social systems from stretching away, in time and space, beyond the control of any individual actors.

The concept of the duality of actor and structure avoids the tendency of belittling the lay actors,⁹ as it allows/ascribes to individuals a capacity to knowingly perform certain practices while ensuring that those practices simultaneously reproduce the wider system, though often in unintended ways (Bryant and Jary, 1991: 23; Giddens, 1989: 253; Cohen, 1989: 26). Practices are structured in such a way that while individuals (in the case of this study, landholders) are knowledgeable about their locality, they act in a way which unintentionally reproduces the wider system of land use in the rural-urban fringe (Giddens, 1991: 204; Giddens, 1989: 300).

Giddens (1984) argued that people as social agents are capable of producing, reproducing and transforming their own history. They are thus constantly creating and recreating their society and locality. Additionally, people are knowledgeable about institutions (i.e. customary and local governance) and practices of their society and locality (i.e. land subdivision through inheritance and reduced economic viability of land sizes) which is absolutely essential for their continued livelihood. These actors may intervene in any course of events in that they can use their knowledge, power and resources to alter the outcome of any event (e.g. initiation of private security by residents when there is increase in crimes as a result of breakdown of communal and social ties). This is because they can choose to act or not to act. If their choice to act (i.e. to address to a particular issue such as insecurity) is successful, then end result may become routinized into the process of social reproduction (Gregory, 1989: 188).

Vanclay (1995) and Davis (1991) argued that individuals make decisions that are contingent upon the conduct of others. That is, their behaviours and actions are also affected by diverse

⁸It is this potential for action that brings into question the concepts of scientific positivism in relation to human interaction and agency.

⁹"Lay-knowledge or practical consciousnesses are only atheoretical in the sense that their conceptualisations and claims are relatively unexamined. Since lay-knowledge is both part of our object, and a competing account of it, our response to lay knowledge must not be to dismiss it, but rather to examine it" (Sayer, 1988: 267).

external institutions, structures and cultural factors that are beyond their immediate setting. The influence on their behaviour is not only through direct interaction or through activities of entities (such as the public media) but is also based on collective cultural history. Culture is constraining as well as empowering. Making choices among the cultural repertoire restricts actors from facing or addressing situations that they may not have experienced before (Vanclay, 1995: 114; Davis, 1991: 57). This may be so in situations of rapid change (such as in the rural-urban fringe) where people may not have appropriate behavioural responses within their cultural repertoire to address resulting consequences. In explaining how human behaviours and actions are structured, Giddens (1984: 27) observed that:

The flow of action continually produces consequences which are unintended by actors and these unintended consequences also may form unacknowledged conditions of action in a feedback fashion. Human history is created by intentional activities but is not an intended project; it persistently eludes efforts to bring it under conscious direction. However, such attempts are continually made by human beings, who operate under the threat and the promise of circumstance that are the only creatures who make their 'history' in cognizance of that fact.

Emirbayer and Mische (1998: 963, 1006) observed that in addressing change, actors draw on agency. Thus it is the use of agency that enables actors to break away from normalized behaviours. This takes place in a temporally embedded process of social engagement that reproduces and transforms the social world through the interplay of habits, imagination and judgments of actors (Bathelt and Gluckler, 2003). Temporal embeddedness¹⁰ defines how actors may reproduce or transform social systems. For instance, a focus on the past allows actors to make selective reactivation of past patterns of thought and action, while a focus on present allows actors to make practical and normative judgments among alternate actions in response to the emerging and evolving situations; and if the focus is based on the future, actors use imagination to generate possible future actions defined by actors' hopes, fears and desires (Emirbayer and Mische, 1998: 1006-1007).

Emirbayer and Mische (1998: 979, 1006-1007) continued to note that agency has three temporal orientations (i.e. *past*: routine, *contemporary*: sense-making and *future*: strategic action) that operate in conjunction. There is however interplay among the three orientations. Routine behaviours are always available for enactment; sense-making is necessary, while choosing among alternatives is a strategic action. Actors, however, adopt one of the three forms of orientation depending on the prevailing dominant condition. When the focus on the past is dominant, actors are likely to re-enact past patterns of behaviour to achieve stability in their life. When behaviours are routinized, they produce a sense of stability, concreteness and permanence among individuals (Pennock, 2004: 20). However, the selective nature of reactivation will in some occasions call for change. This change may not be spontaneous, but become only recognizable through gradual accumulation (as in the case of landholders selling small portions of their lands independent of one another

in their locality and gradually changing the area), or may be drastic (where rapid sub-divisions of several parcels of land takes place at once).

During the process of land use change and in conditions of uncertainty/impermanence about the future of farming as a viable economic enterprise, there may be no previous pattern to borrow from or no chance to act in a strategic way (Liffman *et al.*, 2000: 363, 369). This happens especially if individuals such as indigenous residents in a rural-urban fringe are not structurally prepared to adopt capital and labour intensive farming such as horticulture after the collapse of the traditional farming such as coffee farming. It is one of those instances/situations where urgency is required and choice has to be made at that moment in time and space. In this case, actors (landholders) are amenable to make sense of their situations, and will come up with a way that will help them to react/act to changes to reduce the uncertainty at hand (Emirbayer and Mische, 1998: 1006-1007). In such situations some landholders may seek off-farm employment or sell portions of their farmland to meet their immediate livelihood needs. These activities however can contribute to further marginalisation of agriculture as a source of livelihood for the concerned landholders. Commenting on such human actions, Giddens (1984: 14) observed that:

Repetitive activities, located in one context of time and space, have regularised consequences, unintended by those who engage in those activities, in more or less 'distant' time-space contexts. What happens... then, directly or indirectly, influences the further conditions of action in the original context. To understand what is going on, no explanatory variables are needed other than those which explain why individuals are motivated to engage in regularised social practices across time and space, and what consequences ensue. The unintended consequences are regularly 'distributed' as a by-product of regularised behaviour reflexively sustained as such by its participants (actors).

Emirbayer and Mische (1998: 963, 1006) explained that where elasticity of time allows, actors are able to exercise their imaginative power, express their hopes and fears and come up with a strategic project to achieve the desired future. The choice is made among different alternatives and with different values being articulated in taking a particular course of action. For example, where some landholders diversify their farm production when the situation is normal, the effect of abrupt change may not be adverse to them. Those that diversify their farm production capabilities have a cushion against the immediate effects of income loss and may even have elasticity for manoeuvring to other sources of livelihood.

Long and Long (1992: 23) warned that agency should not be confused with the decision-making capacities of actors. They explained that agency is comprised of social relations and, can only be effected through them. Thus, agency rests fundamentally on the actions of a chain of agents with each of them translating it according to her and his projects, while trying to enrol each other into their own projects. For example, although decline in returns for agricultural produce may affect most of the landholders, not all of them will respond in the same way. There are issues other than just product prices that are likely to affect the ability of landholders to manoeuvre. Such issues include land tenure (Davis, 1991: 10) and cultural factors (e.g. customary aspects of land ownership/use). This explains why different

¹⁰Embeddedness is not spontaneous but experience-based and develops over time from a historical process (Bathelt and Gluckler, 2003: 134).

landholders respond in different ways to the seemingly similar phenomenon. However for some of their actions to be forthcoming/ beneficial, some collective systems (Davis, 1991: 56-57) are necessary to aid them accommodate changes. For example, the presence of a large number of landholders in a given area (say, keeping dairy cows) has the likelihood of attracting milk traders from big cities to buy milk because they have enough supply to support commercial dairy operations.

In addition, in cases where insecurity is a problem, use of vigilante groups by community members indirectly attracted more tenants seeking rental houses than before when insecurity was a problem. In such cases strategic generation/manipulation of a network of social relations among landholders and the channelling of specific items through certain central points of interaction, such as through membership to a family or a village can affect the agency. The concept of agency also integrates the actor's individual action in collective relations (Sewell, 1992: 21).

Change may also occur when social agents who choose to act, produce unintended consequences (e.g. a small community projects such as an access roads opening up new areas for land conversion). A single act may result in effects that were never intended by actors, but consequences may not be large enough to affect the entire system. However, a set of individuals' actions may result in a pattern of unintended consequences, which may then produce effects large enough to influence both the livelihood system and the pattern of regularized practices. The end result, though unintended, may become routinized into the social system, thus altering the pattern of reproduction within the community in a certain locality (Giddens, 1990: 301; Giddens, 1984; Saunders, 1989: 225; Gregory, 1989: 197). These observations accord with Giddens' (1984: 27, 28) observation that:

Homeostatic system reproduction in human society can be regarded as involving the operation of causal loops, in which a range of unintended consequences of action feed back to reconstitute 'information filtering' whereby strategically placed actors seek reflexively to regulate the overall conditions of system reproduction either to keep things as they are or to change them.

VI. SYNTHESIS AND CONCLUSIONS

From the foregoing theoretical review, it is clear that land use change in rural-urban fringes are influenced by three sets of conditions that are interrelated and have evolved over time. These include (i) macro conditions and interactions such as political and economic conditions, agricultural produce markets, corruption, Structural Adjustment Programmes, national regulations and policies, (ii) micro/local conditions and interactions such as local political affairs, local government regulations, corruption, neighbours, customs, off-farm jobs, pollution, land prices, historical aspects (e.g. colonial past), infrastructure and (iii) landholding/ farm/household conditions that influence land use decisions such as values, family labour, clan membership, lifecycle elements, and locational aspects of the land, among others. The three sets of conditions overlap as they are not mutually exclusive (Cark, 2008: 11).

Each landholder¹¹ has a set of relations that extend across place and scale or both. The context in which landholders are positioned affects their response or adjustment mechanisms (Bathelt, 2006: 225). There are also influences on landholders which emanate from their local communities or local interactions such as social networks, clans, neighbours etc. In this case the locally-based relations have a key role in influencing landholders' decisions which lead to land conversions and may also affect the way they respond to the resultant changes.

Landholders are not universally impacted by the macro, micro and landholding conditions, but at the same time they do not have the ability to act entirely outside these forces. Their actions represent countervailing systems that evolve both in resistance to these forces and also as a way to take advantage of local opportunities. Their actions however reproduce the macro and micro structures. Their actions result in a variety of responses, due to agency (Clark, 2008: 13).

Agency (as the ability to act) shows that landholders may act differently and this is the reason why we do not have a homogenous rural-urban fringe landscape (Clark, 2008). Agency defined as the ability to change the context also means that context affects the amount of agency. In Figure 3, there is a portion of household/landholder that is overlapped by local/micro and macro contexts and a portion that is not. The portion of landholder that is not overlapped (and therefore not constrained by the context) represents agency or the proactive strategies that result in adaptations or responses (see Figure 3). The portion of the landholder that is within the overlapping context is a part of landholder that is reactive to the context within which he/she operates. The amount of agency thus depends on the level of landholder's subsumption into micro and macro conditions. Therefore, responses by landholders in the rural-urban fringe can be a reaction and or a realized intention or a combination of the two (Clark, 2008: 13). Their individual responses manifest specific actor-structure relations and are specific expressions of agency.

¹¹This paper acknowledge the presence of diverse actors but have chosen to give landholders more prominence than other actors because the decision to convert land (or not) ultimately depends on them. However, because landholders do not live in isolation, where necessary the paper have made references and links to other actors.

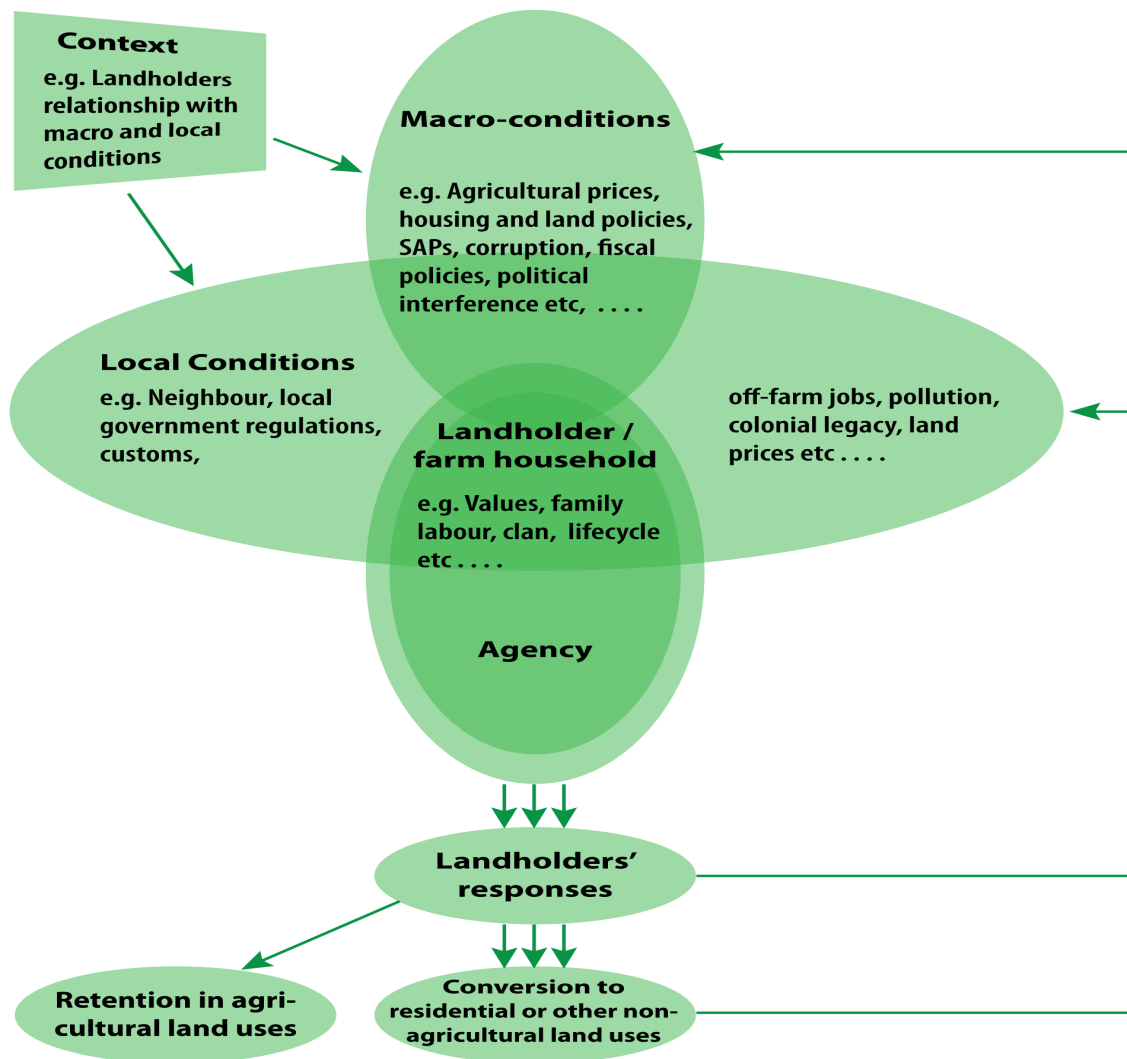


Figure 3: Showing a structuration process in land use conversions. Source: (Adapted from Clark, 2008: 17).

The amount of agency changes over time or among landholders. Agency enables landholders to move away from the norm if conditions call for change. These deviations lead to a variety of responses, one of which is land conversion. The responses and land conversion consequences are then fed back into all the three components, that is, micro, macro and landholding. The effects of each of the three components vary over time and space. Variations in these components affect the level of agency and responses among landholders in the rural urban fringe. This is because agency is mediated through relationships among landholders, and micro and macro conditions. A focus on the agency thus allows one to explore why landholders have different responses in what may seem to be similar structural circumstances. This perspective led to an approach Evans (2008) called a modified political economic approach. This approach emphasises the importance of State policies (or lack of policies), social, environmental, cultural and economic conditions in constraining actions of landholders (and other actors), whilst offering scope to acknowledge that actors usually retain a modicum of choice in their actions under such conditions (Evans, 2008: 217).

This paper concludes that there is no single way to define or characterise a rural-urban fringe. This is because there are no definite boundaries administratively, either regionally or locally, and thus rural-urban fringe is an abstraction of reality. Definition or characterisation should therefore be specific to some condition of interest relating to pertinent issues or for specific purposes, with the criteria used made explicit.

In an attempt to characterise a rural-urban fringe, spatial-oriented theoretical perspectives were considered. However spatial-oriented theories were judged inadequate with respect to providing explanation of rural-urban fringe phenomena such as social, economic and cultural aspects that influence land use. In addressing this gap, an alternative theorisation that included neo-classical economics and political economy approaches were explored for insights, "... through a broader lens of social theory" (Pennock, 2004: 5). These approaches were however, also limited in accounting for the role of agency and contingency¹² in the rural-urban fringe land uses. The actor and

¹²The principle of contingency states that one event does not necessarily cause another particular event. Therefore identical pre-conditions for human action do not have the same consequences at any place and

agency conceptualization, which provided an ontological framework for understanding the role of agency in land development, was therefore adopted. The issue of bridging the gap between structure and agency at the empirical level was also addressed. The notion of bracketing from the theory of structuration is useful as an analytical bridge to the divide between structure and agency.

The paper argues that there is no a single dominant theory or paradigm of land use change that can also offer a cogent explanation of rural-urban fringe phenomena. A multiple conceptual framework from different literature sources on land, housing, economic, urban, among others is thus needed, with the aim to derive partial insights on different aspects of a rural-urban fringe. The adoption of a multiple conceptual approach provides insights into mechanisms of a rural-urban fringe land uses from different theoretical perspectives, with each emphasizing different but related aspects.

The theoretical approaches reviewed in this paper may aid in the conceptualisation of different aspects of the rural-urban fringe land uses, designing the research methodology and in the analyses of field experiences, rather than to prove the theories themselves.

ACKNOWLEDGMENT

I am grateful to Professor Lex Chalmers and Dr. Mairi Jay, both of The University of Waikato, New Zealand, for their comments on the PhD research project from which this paper is based.

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time. This provides an epistemological basis for a context-specific conceptualisation of intentions and consequences of human action. At the same time, it is recognised that future actions and development are fundamentally open-ended (Bathelt and Gluckler, 2003: 127).

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