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Policy and practice: Stakeholders' satisfaction with conventional and participatory land use planning in Ghana

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ABSTRACT

Land use planning remains an integral tool for guiding the growth and development of human settlements due to competing interests and claims of individuals over land. Two major land use planning approaches are adopted - conventional and participatory - with inconclusive findings on the best approach to employ towards promoting orderly development and growth. This study thus contributes to this debate by exploring how conventional and participatory land use planning approaches affect the preparation and outcome of land use plans in Ghana, using Abuakwa Newtown in the Atwima Nwabiagya Municipality and Krapa No.1 of in the Ejisu Municipality as case study areas. Through a comparative case research design, quantitative and qualitative approaches were employed to gather and analyse data from 397 property owners and other relevant stakeholders. The aim was to explore the similarities and differences between the two approaches and stakeholders' perception and satisfaction with both processes. The findings largely revealed differences in the land use plan preparation process – plan initiation, preparation and approval - in the two communities. It was revealed that only plan implementation activities had similar outcomes in both communities. The ordered logistic regression model deemed significant at $p \leq 0.05$, revealed a negative relationship of satisfaction between tenure security, plan initiation and preparation in Abuakwa Newtown, but a positive relationship in Krapa No.1. The research recommends that planning authorities adopt participatory land use planning and improve upon communication in the processes for active participation and involvement.

Introduction

To coordinate both public and private investment decisions, planning is essential (Cloke, 2013). Considering the difficulty in changing a use of land once put to use, there is the need for land use development co-ordination to be instituted to address the problems of development inefficiencies. Several factors (e.g., demographic, socio-economic, cultural, environmental and political) consequently account for varying land use planning approaches and outcomes across the globe (Tipple, 2011; Mcllwaine & Willis, 2014). The careful actions taken in order to determine the use of land to enhance aesthetics, encourage compatibility of complementing land uses, promote convenience, enhance health as well as wellbeing of inhabitants of a given settlement is often conceptualized as land use planning (LUP) (Gurran, 2008). LUP is further conceptualized as an organized and interactive process carried out to provide an environment capable of sustaining the development of land resources in meeting the needs and demands of people. In effect, LUP is severally alluded to be an integral tool for directing the growth and orderly development of human settlements due to the competing interests and claims of individuals of a given piece of land (UN-Habitat, 2013).

From the foregoing, a single piece of land could be put to varied uses through LUP (Cloke, 2013; Cobbinah et al., 2020). The dominant narrative suggests that the process of LUP assumes two forms, which is largely determined by the extent to which various categories of stakeholders of the land being planned for are involved in the process (Cloke, 2013; UN-Habitat, 2013). Consequently, two main approaches to LUP have been identified: the conventional LUP - elsewhere referred to as "expert-driven" approach (Barton, 2009; Prager et al., 2012) and the participatory LUP approach (Prager et al., 2012). The former, known as the blueprint or institutional approach, is the most applied approach to land use planning in many countries. The recognizable weaknesses of the conventional top-down approach resulted in the development of the participatory LUP approach as an alternative. The latter is more centred around people and takes the form of a bottom-up approach (Abrantes et al., 2016; Alfasi et al., 2012), with inconclusive outcome on which should be the most preferred approach to LUP.

With development largely described as a spatial activity, the interests of people with diverse claims to land should be met (Arko-Adjei, 2011). The most important aspect of participatory nature of planning, is therefore, to promote and encourage individuals who might be affected by a proposed development intervention in the decision-making process.

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The premise of this argument is that when stakeholders are adequately involved in taking decisions that concern them, there is increased ownership of both the process and the results, leading to a higher probability of conformity and compliance to the process' outcomes (Ramphal et al., 2014). Hence, people's participation with regards to LUP is a critical condition for orderly development (Yendaw, 2014).

Consequently, the level at which LUP takes place largely depends on the use to which land is put (Yachori, 2017). Institutions of LUP are mandated to manage and control land use issues through policies and regulations as well as enforce such regulations to achieve their aims. With this, LUP is a regulatory component of the land administration paradigm (Lauf et al., 2012), used to sustainably, efficiently and effectively manage land. Most importantly, it presents a development approach that contributes to the prevention of conflicts, the adaptation of land uses to physical and ecological conditions, the lasting protection of land as a natural resource, the lasting productive use of land and a balanced use that fulfils all social, ecological and economic requirements (Bagheri et al., 2015; FAO, 1996). In spite of these, studies (e.g., Kleemann et al., 2017; Cobbinah et al., 2020) show that land use plans developed by planning authorities in many African countries are weak due to the laxity in enforcement and implementation of legal regulations, coupled with complex land tenure systems and the poor participation of local citizens in the process. These have often resulted in conflicts, unplanned developments and disasters. While some schools of thought call for the institutions or experts leading and controlling LUP process due to their technical expertise (conventional approach) and possibility of achieving better outcomes, others suggest that LUP process should be participatory to promote ownership of both the process and its outcomes.

This study, considering the inconclusive argument on which is better - either adopting the conventional or participatory LUP in developing plans - comparably assesses the LUP approaches used to prepare local plans and examines the level of satisfaction of stakeholders regarding their involvement in the preparation of local plans in the Atwima Nwabiagya and Ejisu Municipalities. The study consequently seeks to answer two questions: (1) What is the nature of land use planning process used to prepare local plans in the Atwima Nwabiagya and Ejisu Municipalities? (2) What is the level of satisfaction of stakeholders regarding their involvement in the preparation of local plans? Based on these questions, the study hypothesizes that the involvement of stakeholders in the LUP process would have a significant implication on their level of satisfaction; thereby, contributing to the sustainability of local plans. The premise of this is that effective LUP, based on which approach should be promoted, is very key to the overall spatial development of Ghanaian, and African cities at large. The active involvement of those who have a stake in the development of these plans to ensure compliance are very paramount. Therefore, results of the study would be useful to the Municipal Assemblies and policy makers to appreciate how valuable any adopted LUP approach is with regards to compliance and the development of the country.

Literature review

Tracking transformations in land use planning approaches in the face of prevailing theories

LUP has evolved over the years (Kaiser et al., 1995). The knowledge and advancement of land use plans have been observed differently both in the global north and south (Kaiser et al., 1995; Kaiser and Godschalk, 1995). However, the evolution and applications of LUP in many developing countries follow a two-phase process - conventional and participatory - though the timeline of each phase varies from place to place (Bond and Hulmi, 1999; Faludi, 2000).

First and on one hand, the conventional LUP approach employs a rigorous, scientific methodology and follows a set of sequential steps to produce a comprehensive document. The process of developing such plans is often cumbersome and long, taking several years to complete, and leave little room for more detailed recommendations and comprehensive operational plans (GIZ, 2012). Until recently, the traditional top-down approach to LUP largely failed to achieve the needed outcome due to the weakness or failure to take into account the needs and concerns of all those involved. Oftentimes, the impetus for change do not come from the stakeholders themselves; rather, from (non-) governmental institutions (FAO, 1996). While this does not signify the exclusion of immediate stakeholders from the process, it does indicate that their involvement is limited (Kwakernaak, 1995; FAO. 1996). Despite no consultation with the people who actually use and manage the land, the process follows the traditional approach of systematic technical surveys from which plans are formulated by central government bodies and detailed by professional staff to meet predetermined goals (GIZ, 2012). This lack of consideration for local people has resulted in plans that are unsuitable to the local context.

On the other hand, the beginning of participatory LUP efforts were often limited to isolated experiments in certain villages and communities. These focused on validating new land use practices (Amler et al., 1999). However, due to the poor collaboration between stakeholders and locals as happens with the conventional LUP process, more attention is now being paid to increasing stakeholder involvement and coordination as well as the introduction of participatory tools (Furst et al., 2014; Hewitt et al. 2014). This has allowed for local administration, relevant policy makers, and NGOs, among others, to work together for better results (Hewitt et al. 2014). Despite this, the success of these initiatives is still limited to individual localities, with no widespread application of the same experience or integration of local land use plans into higher level LUP (Randolph, 2004; Godschalk, 2004).

Related to the foregoing, several planning theories such as the systems and rational comprehensive theories assume that the general public is not much knowledgeable about plans; hence, justifying calls for leaving them out of the entire decision-making process (Chadwick, 1971; Mcloughlin, 1969). Proponents of this school of thought argue that planning should use scientific and objective methods for all planning processes, separating means from ends and avoiding politics. Certainly, planners should use cognitive skills, tools, models and expertise to make decisions (Allmendinger, 2009). However, the role of discourse in planning has been studied in recent years, leading to new theories and approaches such as the transactive planning, communicative planning, and collaborative planning (Morphet, 2010). The main idea of these theories, and relevant to spatial planning, is to involve different groups of people (particularly, beneficiaries of interventions) in a dialogue to share resources and work together to resolve issues (Furst et al., 2014; Hewitt et al., 2014). These emphasize creating places that reflect equal and cooperative relationships between all stakeholders to address problems in communities (Hewitt et al., 2014).

The role of land use planning in promoting responsible land management

The use and management of land involves the establishment of standards, procedures, and systems for determining who can access and utilize land, how the decisions are executed, and how disagreements over it are handled. It includes official, traditional, and non-legal entities, regulations, and processes that govern access to and use of land (GIZ, 2012). A lack of robust LUP and management can lead to state capture, the unlawful appropriation of public land, the large-scale acquisition and renting of land without recognizing the rights of local people, and administrative corruption through bribery in the granting of building permits (OECD, 2008). In contrast, responsible LUP and management enables decision-making and enforcement that are fair and transparent, with equal opportunities for everybody to participate and receive an equitable benefit, while ensuring sustainable land development for economic, social, and environmental purposes (FAO, 1996).

Studies have identified numerous roles LUP play in the successful configuration of spatial activities especially in Sub-Saharan Africa. Thus,

LUP has been widely accepted as an effective mechanism for promoting collective interests and wellbeing, particularly in terms of providing safety, health, convenience, economy, and aesthetics. Since its inception, this tool has been employed to maximize societal benefits. In spite of this, LUP which often depict how future (urban) development will proceed, become increasingly limited due to their lack of consideration for local discretion and the need for innovation as mentioned by Rauws et al. (2014). Similarly, Nnkya (1999) claimed that LUP practices neglect the exchange value of land, and the ambiguity of the land law concerning customary land tenure which have led to a non-collaborative, illegal, and unfair LUP system that fails to recognize the rights and interests of landholders in Moshi Municipality. Contemporary literature has also attributed the challenges of LUP to being more expert-driven (Poku-Boansi and Cobbinah, 2018) and having weak institutions put in place (Cobbinah et al., 2019). Other studies have also highlighted corruption, bureaucratic procedures, low compliance to the land use plans and the political interference of those plans as the key LUP challenges (Baffour-Awuah and Hammond, 2014; Boamah, 2014; Adjei-Poku, 2018). A study Acheampong and Ibrahim (2016) which assessed the duality of planning systems in Ghana revealed that the mechanisms to guarantee successful policy integration were inadequate and inefficient. Furthermore, they revealed the lack of suitable institutional arrangements and reliable financing sources, as well as conflicting institutional roles, as the major hindrances to successful integration in the newly established hierarchical spatial planning system.

The complex issues of LUP are often underestimated by contemporary scholars. It is important to note that LUP involves a wide range of interests and stakeholders, all of whom should be given a platform to have their voices heard. Although the objective of LUP is to find solutions that benefit everyone, the lack of inclusion in the discussion can be an obstacle to achieving this. It is imperative that all parties are included in the decision-making process to ensure that collective interests are taken into account and that the solutions are fair and equitable. Indeed, LUP decisions can also greatly influence the type and intensity of land use, the overall growth and development of an area. As such, it is essential for practicing planners to be aware of the potential ramifications of their decisions in terms of the LUP process. Therefore, the study claims that LUP process can be able to identify and analyse the complex issues by developing effective LUP approach. Understanding these complexities imply that LUP actors can ensure their decisions appropriately meet the needs of their communities, and environment.

Additionally, as shown in Fig. 1, LUP has been observed to be critical in the development of land use plans (local plans). The process of developing these plans is fundamentally put into two distinct forms i.e., top-down and bottom-planning process. The adopted approach for the former planning process is mostly conventional where experts in LUP are mandated to ensure the development of land use plans without involving those whose have claims or rights to such lands. The development of these land use plans is as a result of directives from central government ministers to local government authorities, engineers and urban planners. On the other hand, the latter process adopts a participatory approach that ensures inclusiveness in land administration and management especially for those whose claims/rights to land are not fully acknowledged. Thus, individuals who have direct claims to land such as traditional authorities (chiefs), land or property owners and developers are involved right from the onset of the planning process. However, whichever approach is adopted in planning has a direct link with stakeholder satisfaction and the prepared land use plan.

Revisiting land use planning approaches: a conceptual review of land use plans and planning approaches in Ghana

LUP is an organized and interactive process carried out to provide an environment capable of sustaining the development of land resources in meeting the need and demands of the people. It considers the process of measuring the physical, socio-economic, institutional and legal potentials as well as constraints in other to yield an optimal and sustainable use of land resources to help people in making the best decisions of allocating those resources (Bagheri et al., 2015; FAO, 1996). It spells out the basics for attaining a form of land use that is more sustainable and also acceptable both in the social and environmental context desired by the society (Awange, 2018; Healey, 1998). It does not take into consideration only the production, but also functions of land, including areas that are protected, land for recreation, land for the building of roads, waste disposal sites as well as restricted land areas such as buffer zones, etc. (Lauf et al., 2012).

LUP and its accompanying planning legislations is a human settlement phenomenon that is well established in Ghana. LUP was officially brought into the country's planning systems in the nineteenth century (Baffour-Awuah et al., 2014; Kuusaana & Eledi, 2015). The initiation of LUP together with development controls by government in the 1960s was done through legislation as well as how ready development plans were perceived (Baffour-Awuah et al., 2014; Boamah et al., 2012). The approaches to LUP, as adopted by the colonial masters, supplanted the customary land tenure system of the country with that of the tenure systems in the western part of the world which saw land as a commodity requiring enure security through land titling (Baffour-Awuah et al., 2014).

The beginning of formal planning in Ghana was commissioned by Gordon Guggisberg with the 10-year development plan (Pimpong, 2006). The focus of the plan was on the development of basic infrastructure (Acheampong & Ibrahim, 2016; Fuseini & Kemp, 2015). The enactment of the 1945 Town and Country Planning Ordinance (CAP 84) brought about the first framework for spatial planning in the country (Acheampong, 2019). The CAP 84 mandated the Town and Country Planning Department (TCPD) to sanction and implement planning related proposals for the development of settlements in an orderly manner (Tasantab, 2016). The demand for economic growth and development after independence resulted in the amendment of some sections of the Cap 84 such as Act 30 and Act 33 in 1958 and 1960 respectively (Acheampong & Ibrahim, 2016).

The standards for sustainable development in the midst of financial take-off in the nation prompted the development of the National Physical Development Plan spanning close to a decade to control the organization as well as economic activities of spatial entities and infrastructure development (Fuseini & Kemp, 2015). Ghana commenced a decentralized planning system with the initiation of the National Development Planning (Systems) Act, Act 479 in 1994, and the 1993 Local Government Act (Act 462) to oversee the planning and deliberate development of human settlements and to manage land development (Acheampong & Ibrahim, 2016; Fuseini & Kemp, 2015).

Land use planning process in Ghana

The Physical Planning Departments (PPD) is mandated to oversee spatial or physical planning at all levels, with the help of stakeholders such as the EPA, traditional heads, the survey department, and the Lands Commission in the preparation and implementation of plans (Tasantab, 2015). Criticisms of Ghana's physical planning system indicate that the focus of planning is on the principles of the CAP 84 despite the efforts made to pass out the Land Use and Spatial Planning Act 2016 (Act 925) (Korah et al., 2017).

Conventional land use planning process

As earlier indicated, LUP in Ghana was first introduced through the CAP 84 to provide an orderly and sustainable development of human settlements as well as land development in the country. The Town and Country Planning Act of 1958 (Act 30) made modifications to the CAP 84 which established the board for the TCPD mandated to provide an orderly and progressive development of human settlements whether in rural or urban areas and an overall social improvement of such areas. In 1960, the amendment of the Town and Country Planning Act 1960 (Act 33) officially abolished the board. Even though CAP 84 was in full effect,

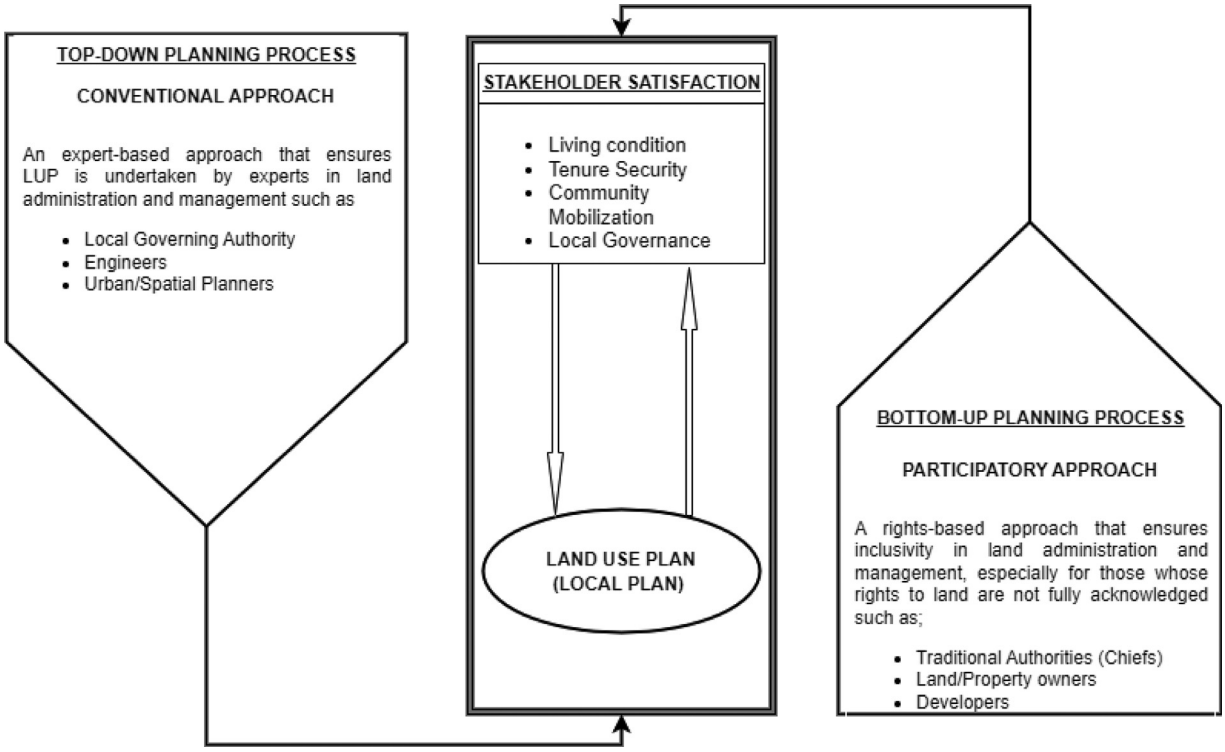

Fig. 1. Framework for understanding Land use planning and stakeholder satisfaction.

the Local Government Act (462) in 1993 gave planning powers to the District Assemblies. The declaration of a planning area is undertaken by the Minister after consulting with the local governing authority. After the declaration of the planning area, the Minister makes appointments of planning committee, comprising the town or district engineer, medical officer of health, and not less than two members of the relevant local authority nominated by that authority. All other appointments including the chairman of the committee and presiding members are appointed by the Minister. The committee provide the Minister with information that may be required for the current and future planning needs of the planning area.

In the preparation of land use plans under CAP 84, the Minister consults with the committee to name the scheme for the planning area. The scheme made under CAP 84 is done for lands in urban or rural areas that may or may not have buildings on them. The scheme made at this point may be called "preliminary scheme", "a supplementary scheme" or "a final scheme" under specific contexts. In the context of a preliminary scheme, it may consist of at least one provision of the contents of a final scheme. A supplementary scheme converts a preliminary scheme into a final scheme. The final scheme is the completed and detailed scheme of the area which provides the provisions for the development of settlement in the area.

Upon the completion of a final scheme, deposit and notice of deposit of the scheme is undertaken in a place chosen by the Minister. The notice of deposit and the period in which a person may inspect such notices and make representations with regard to the scheme is gazetted and published in two local daily newspapers by the Minister. A window of two months is given to persons who wish to inspect and make representations to the Minister about the scheme. After the notice of deposit, the Minister approves the scheme or part of the scheme based on appropriate modifications. A copy of the scheme is deposited in the planning office of the planning area for inspections as directed by the Minister.

Participatory land use planning process

The Land Use and Spatial Planning Act 2016 (Act 925) and the Manual for the Preparation of Spatial Plans prepared by the Ministry of Environment Science and Technology (MEST, 2011) lay the conditions for LUP in the country and emphasise the need to make the process more participatory. All land use plans to be prepared must be based on geo-referenced maps that are current and up to standard. It must also use satellite images and line maps with a scale of 1: 2500 or larger.

The initiation of the preparation of land use plans, as stated in the Act 925 and zoning guidelines for preparing spatial plans, shows that the Statutory Planning Committee is to guide the preparation of a local plan for an area that falls under its jurisdiction. This would be effected within the timeframe as specified by the authority or by the regulations. However, it is to be undertaken in consultation with the Physical Planning Department and must also be in conformity with the structure plan. Upon the initiation of the land use plan, funds for the preparation are sorted out. The funding of the plan to be prepared takes into consideration categories of persons whose interests is to guarantee the implementation of the proposals as captured in the structure plan on daily basis; to demarcate those lands for sale; or to actually develop land amongst others.

The preparation of the land use plan is to be undertaken by qualified individuals who have an appropriate academic and professional backgrounds. In the preparation of local plans, urban or settlement planners are to be engaged. In the preparation of base maps, surveyors and trained GIS experts are to be engaged. The preparation can also be done by consultants engaged by the MMDA that the planning area falls under. Real estate developers or land owners of the planning area may also be engaged in preparing the land use plan of the respective area.

The Technical Sub-Committee are charged with the initial approval of local plans. They also have the responsibilities of preparing, coordinating and harmonizing plans, providing development control measures as well as the acquisition and protecting public lands in the planning area. The Technical Sub-committee are mandated to forward to the Statutory Planning Committee the Local plan for final approval by the Assembly. The approved local plan is then finally signed by the Chairman and Secretary of the Statutory Planning Committee. The plan is

Table 1
Preparation process of local plans.

Stages	Description of Stage
Reconnaissance Survey	The Reconnaissance survey deals with getting first-hand information of the area for the preparation of the local plan.
First Stakeholder Consultation	This stakeholder consultation is done to create the awareness of the public and educate them on the importance of planning as well as seek their support. Also, the soliciting of local knowledge from indigenous people and other parties in the planning area would be obtained.
Updating of maps and Site analysis	Qualified surveyors shall be contacted to update the planning area's base map using GIS technology. The update would take into consideration structures currently existing, land boundaries, roads, bridges, drainage systems, and also other physical features of the area. Other maps depicting the contour lines of 1 metre elevation and more would also be studied and updated.
Social survey of existing and or identified target population	This stage helps in the provision of a profile of the beneficiaries existing in the planning area such as traditional buildings. It also helps in the assessment and clarification of community aspirations which include their needs and priorities for the development of the area.
Analysis of the socio economic and land use data	The baseline study which also captured the socio-economic data and land use data would be analysed according to the provisions made in the structure plans such as zoning and planning requirements in the area which would then be incorporated in the local plan design.
Generation of alternatives to ordering land uses in the local plan area, and second Stakeholder Consultation	Schematic designs which show different ways of allocating the land uses in the planning area are developed. The development of these schemes takes into consideration cost implications as well as other relevant issues and subjected to a second stakeholder consultation
Draft Local Plan and Report and Implementation Plan	A drafted Local Plan and report would then be prepared for the area. The drafted plan gives a description of the physical characteristics; gives provisions of the structure plan required for the area in terms of and zoning regulations, slope and site analysis reporting and the application of planning standards. A prepared implementation plan that provides where needed, the cost of development, funding sources for such development, and unforeseen costs that may arise in future would be the responsibility of the developer to bear.
Third Public Stakeholder Consultation	The local plan and its report that has been drafted is subjected to a third stakeholder consultation. The essence of this is to receive comments and opinions which would be expressed and incorporated into the process to improve the plan. The avenue would also be used to create the awareness of the stakeholders on their roles and responsibilities regarding the implementation of the prepared local plan.
Notice of availability for inspection, placement of Local Plan in Public Data Room and mobilization of funds for Plan implementation	Interested departments of the MMDAs, the community as a whole and stakeholders are issued with notices of the drafted local plan to make revisions and comments on the plan. It is then put in a Public Data Room for an open inspection for a minimum period of 60 days starting on the day of notice. Comments by the general public and also other relevant stakeholders would be channelled to the Physical Planning Department
Final Plan and Report and the Signing of the plans	The plan shall be finalized, approved and singed when the comments and concerns are brought on board. However, the process of implementation would be monitored after which evaluation would commence.

Source: MEST, 2011.

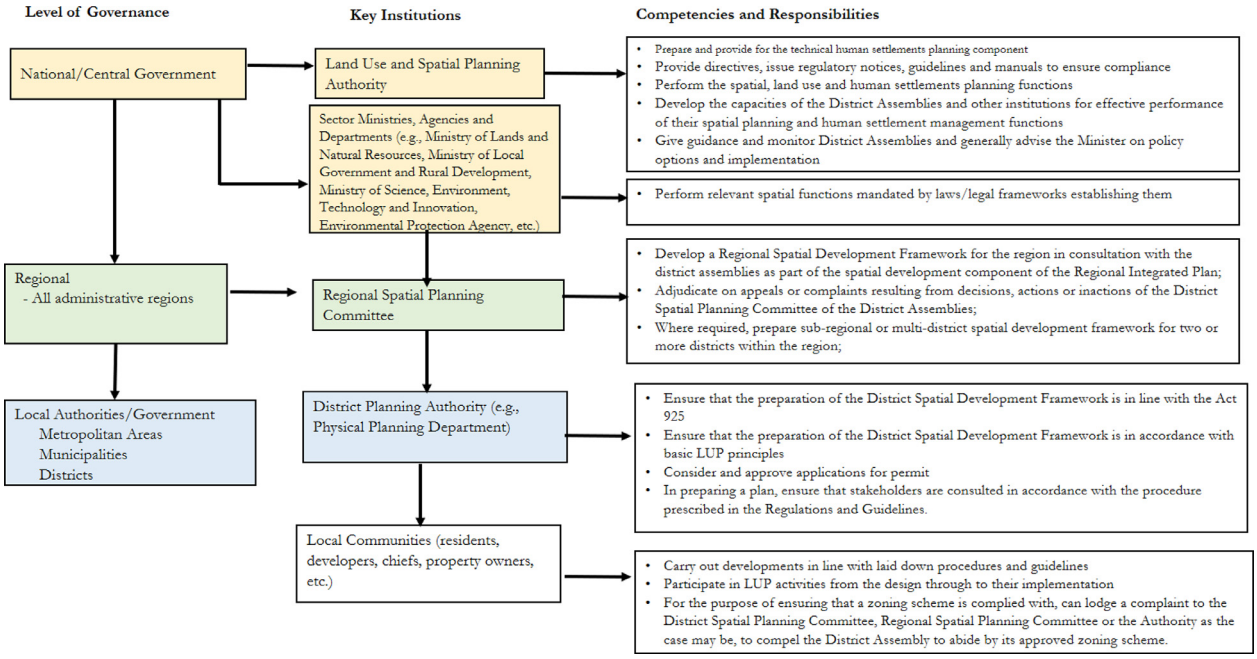

Fig. 2. Spatial and Land use planning governance in Ghana and relevant stakeholders.

then gazette and Statutory departments and agencies are provided with copies of such plans. Table 1 shows the process followed in the preparation of Local Plans.

Related to the above, there exists several stakeholders who play important roles in promoting effective land use planning at the local above as stipulated in the Act 925 (Fig. 2).

Materials and methods

Profile and justification of study setting

The study was undertaken in two communities, namely, Krapa No.1 in the Ejisu Municipality and Abuakwa Newtown in the Atwima Nwabi-

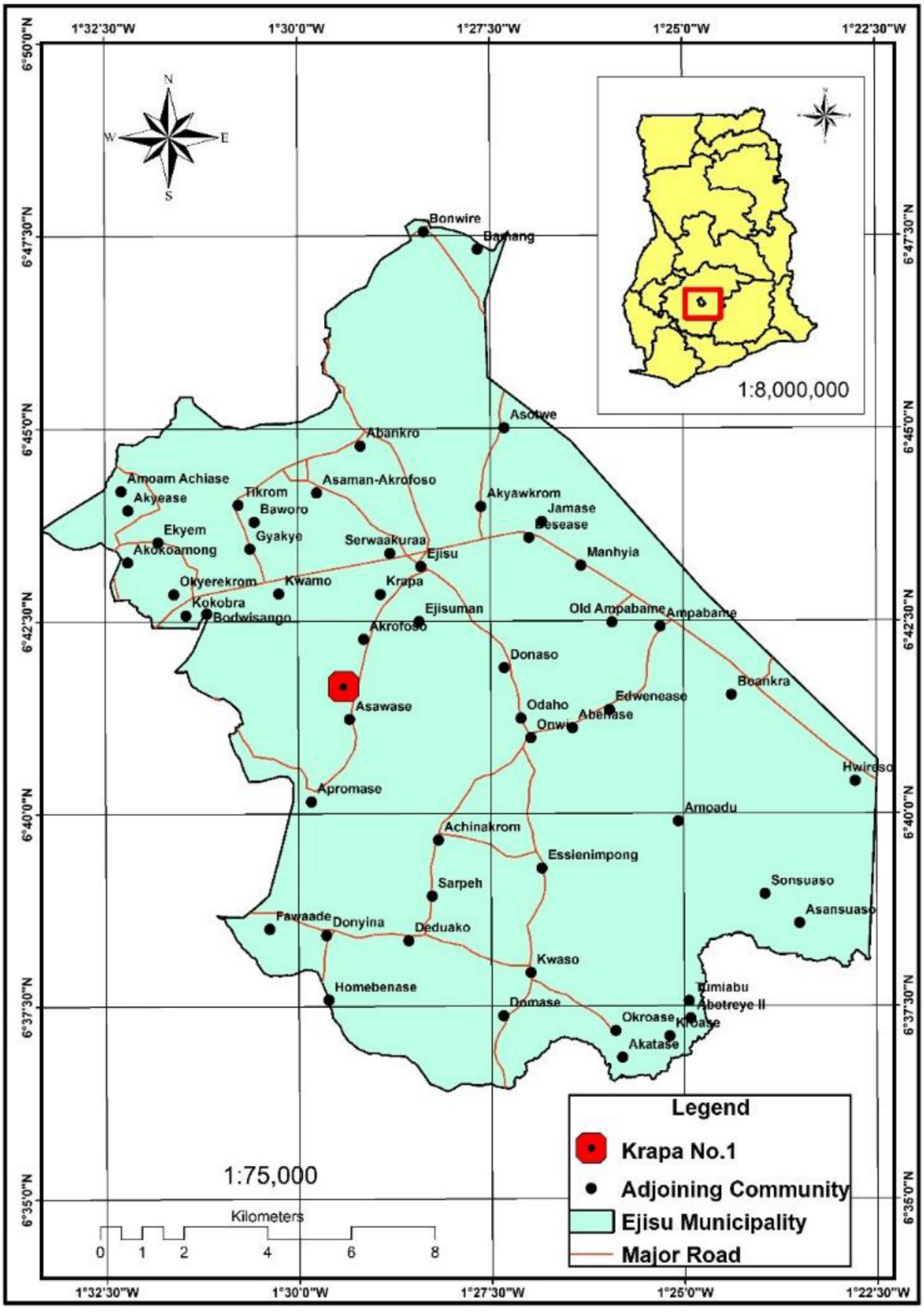

Fig. 3. Krapa No. in Ejisu Municipal Context.

agya Municipality (Figs. 3 and 4). First, the Ejisu Municipality is one of the many MMDAs in Ghana, located in the Ahanti region. It is known for its kente weaving industry, and cultural heritage. The Municipality shares borders with five other MMDAs: Juaben, Kwabere East, Bosomtwe, Asante Akim South, and Oforikrom (Ghana Statistical Service, 2014). Secondly, the Atwima Nwabiagya is also found in the Ahanti region of Ghana with Nkawie as its administrative capital. It lies between 6° 32′N and 6° 75′N and 1° 45′ and 2° 00′ West. It is located in the western part of the region, bordering Ahafo Ano South and Atwima Mponua districts (west), Offinso Municipal (north), Amansie–West and Atwima Kwanwoma districts (south), Kumasi metropolis and Afigya Kwabre districts (east), covering 294.84 sq km.

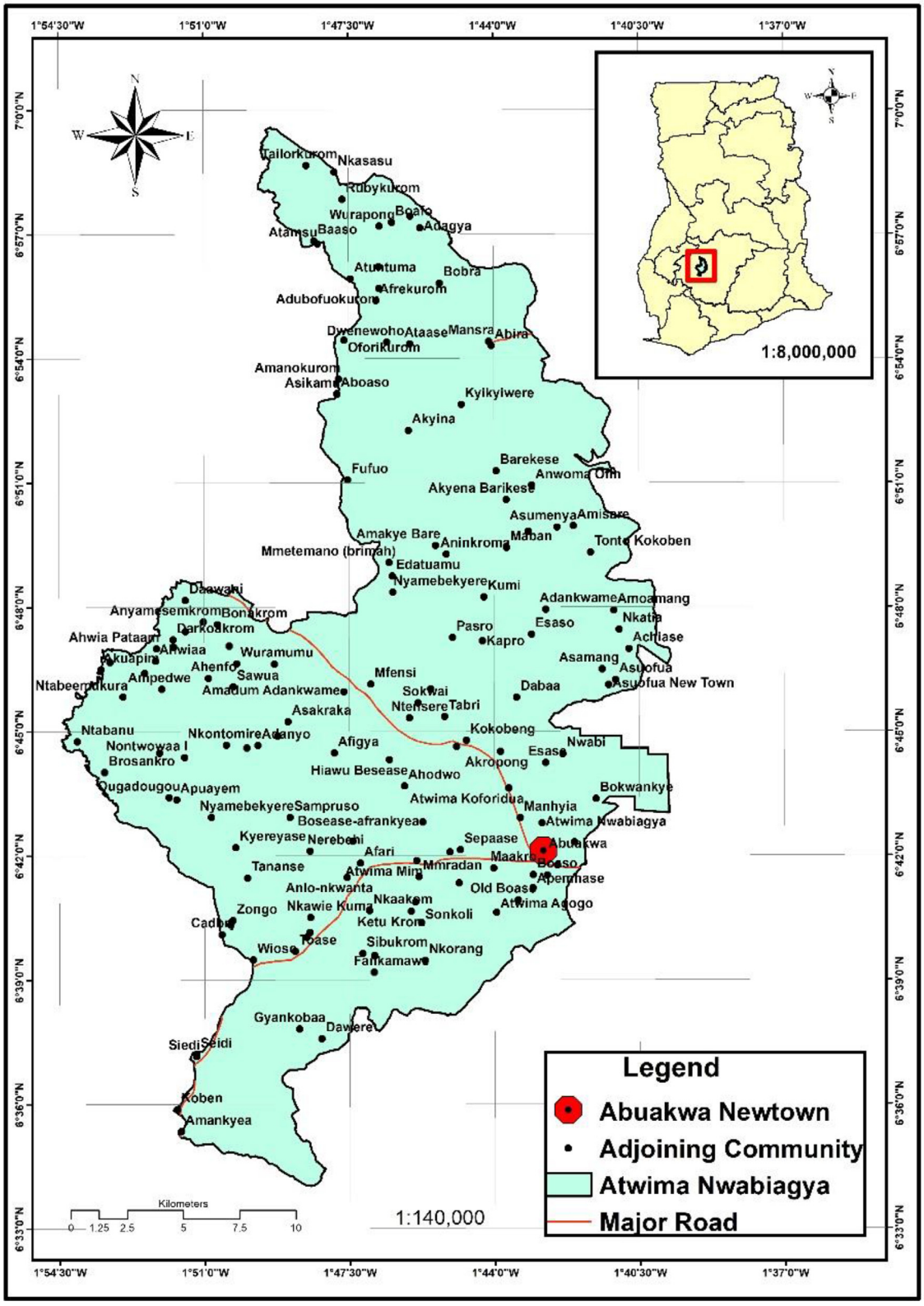

Fig. 4. Abuakwa Newtown in Krapa No. in Atwima Nwabiagya Municipal Context.

The two communities were selected because of the unique characteristics they both possess in their respective municipalities. Krapa No.1 has over the years witnessed significant physical and socio-economic development. The growth of Ejisu as a community has increased exponentially resulting in the trickling down of physical developments in its suburban communities such as Krapa No.1. The community was one of the communities selected for the first phase of the national Land Administrative Project, which was set out to achieve different objectives, most importantly to revitalize LUP and management in Ghana through new LUP system. Krapa No.1 was selected because a participatory LUP approach was adopted in the preparation of its local plan. On the other hand, Abuakwa remains one of the fastest developing urban areas in

the Atwima Nwabiaya Municipality. Again, its proximity to the Kumasi Metropolis has made it an attractive place to stay as it provides easy accessibility to the city centre. It is also worth noting that, the preparation of local plan in this urban community adopted the conventional expert-driven land-use planning approach. Based on this background Abuakwa Newtown was chosen as the other community for the studies.

Research approach

The comparative mixed method research design was employed to essentially compare how land use plan preparation process affect the level of stakeholder's satisfaction in an attempt to draw conclusions to inform LUP practice and policy. Comparative design is a long-standing research methodology that has become increasingly popular in the age of globalization and technological advances (Azarian, 2011). It is primarily used to gain insight into the causes behind an event, feature, or relationship by examining variations in explanatory variables. Comparative analysis helps to identify similarities and differences between different phenomena, and to explain the underlying reasons for those differences. Comparisons can be made on regional, national, or international levels, depending on the subject and area of interest. The design was therefore adopted in identifying and analysing similarities and differences between the two LUP approaches in the study communities. Both quantitative and qualitative data were gathered. The qualitative data was obtained through in-depth interviews with heads of the Physical Planning Department (PPD) and heads of traditional authorities (chiefs). These categories of respondents were purposively selected because they are key stakeholders with relevant knowledge and experience in the LUP and management in their respective jurisdictions. The Land Use and Spatial Planning Act 2016 (Act 925) stipulates that the PPD of MMDAs and traditional authorities serve as key stakeholders in preparing local plans and therefore, served as key informants for the study. Municipal Planners in both Ejisu and Atwima Nwabiagya Municipalities were interviewed using an interview guide. The chiefs who are the custodians of the lands in Krapa no.1 and Abuakwa Newtown were also interviewed using an interview guide. Data from these respondents were gathered on different LUP themes. Under the plan initiation and preparation stage, data on the statutory roles and function of the PPD; the stakeholders responsible for the preparation of the local plan and the reason for its preparation; the committee setup to manage the preparation process as well as notifications; and the creation of a database for participants were collected. Plan approval and implementation processes also made use of data on the statutory roles and responsibilities of the Technical Subcommittee and the Statutory Planning Committee of the MMDAs. Data on issues of monitoring and the conformity of development application with local plans were also gathered.

On the other hand, the quantitative data was obtained through survey of property owners and developers in the two communities. Property owners are mostly the orchestrators of the growth of communities as their use of land has an effect on the development of land. To determine the appropriate sample size for the survey, mathematical formula by Lynch et al. (1974) was used:

$$n = \frac{N Z^2 \mathrm{p}(1-\mathrm{p})}{\mathrm{Nd}^2 + \mathrm{Z}^2 \mathrm{p}(1-\mathrm{p})}$$

By this formula, for sample size determination, 'n' represents the calculated sample size, 'N' represents the sample frame i.e. the population out of which the sample was taken, 'Z' (1.96) is the standard deviation corresponding to a confidence level of 95%, 'p' is the highest possible proportion (0.5), and' the margin of error (0.05). To estimate the sample size, the total number of houses (housing stock) in Krapa No.1 and Abuakwa was needed to obtain the sample frame. The selection of houses as the sampling frame was mainly due to its effectiveness in identifying property owners in the study communities. For Krapa No.1, the total number of houses identified was 768 out of which a sample size of 186 was estimated. Abuakwa had a total housing stock of 1011, out of which a sample size of 211 was obtained. Hence, in all, a total of 397 property owners were surveyed to obtain the quantitative data on the phenomenon. The systematic sampling was then adopted to select the various housing units that were sampled in Krapa No.1 and Abuakwa Newtown. After estimating the sample size of 186 for Krapa No.1 and 211 for Abuakwa, a sample interval of 3 and 4 were also estimated for both communities respectively. The estimation of the sample interval was determined by finding the average between the sample frame and the sample size (i.e., $k = \mathrm{N/n}$). To facilitate the sampling process, ArcGIS (using attribute tables) software was used beforehand to randomly pinpoint a demarcated plot on each of the local plans of the communities. The housing unit on the identified demarcated plot of the local plan was used as the starting point for selecting respondents. Only one respondent was selected from each sampled house. In instances where the property owners were not there or willing to participate, the next house was selected and the cycle continued. The quantitative data was collected on the respondent's satisfaction levels regarding their knowledge and involvement in the LUP process using 397 structured questionnaires. This was done taking into consideration the dimensions of satisfaction and the relationship it had on the LUP process.

The indicators for the dimension of satisfaction of the respondents were living conditions, tenure security, local governance, and community mobilization (Appendix 1). An initial 5-point Likert scale (not at all satisfied to extremely satisfied) was used to determine the satisfaction levels of property owners. An ordered logistic regression model was then used to further determine the degree of influence and significance on the LUP process. The satisfaction level variables were considered the outcome (dependant) variables whiles participation in the LUP process the predictor (independent) variables. The relationship between the dependant and independent variables was deemed significant at $p \leq 0.05$.

Results and discussion

Demographic information of property owners

This section presents an overview of the characteristics of property owners in the study. With a 100% response rate and as presented in Table 2, 10% of the respondents are between the ages of 36 and 45 years old, while 37% are between 46 and 55 years. This suggests that the population is economically active, with adults of working age involved in a variety of economic pursuits. Again, majority (72%) of the property owners were married. This indicates that marriage is an important factor in the acquisition of physical properties. It also demonstrates that married couples are more likely to put resources together to own physically developed properties. Most respondents had some form of formal education, with senior high education having the highest response rate at 25%, followed by tertiary (24%) and primary education (19%), and junior high education having the lowest response rate at 16%. Again, 92% of the respondents were employed, while only 8% were unemployed.

Land use plan preparation process in Abuakwa Newtown and Krapa No.1

In order to gain an in-depth understanding of the nature of land use plan preparation processes in Abuakwa Newtown and Krapa No.1, the study assessed the plan preparation process associated with the conventional and participatory approaches to LUP. The local plan preparation process from plan initiation, preparation, approval and implementation were the indicators for the assessment of the process. Before a local plan can be accepted and approved, it must be prepared in line with the LUSPA guidelines and the planning standards. Some respondents affirmed that:

> "the idea to prepare a local plan of a community solely rests on the shoulders of the Municipal Assembly. Therefore, the municipal assembly initiated the local plan of Abuakwa Newtown through the PPD." (Respondent 1, Abuakwa Newtown, July 2020).

Table 2
Background information of respondents.

Respondents Characteristics	Abuakwa Newtown		Krapa No.1		
	Freq. of responses	Percentage	Freq. of responses	Percentage	Overall%
Age					
20–35	5	2.34	4	2.15	2.27
36–45	13	6.16	25	13.44	9.57
46–55	84	39.81	64	34.41	37.28
56–65	68	32.23	41	22.04	27.46
66–75	26	12.32	38	20.43	16.12
Above 76	15	7.11	14	7.53	7.30
Total	211	100.00	186	100.00	100.00
Gender of respondent					
Female	63	29.86	56	30.11	30.00
Male	148	70.14	130	69.89	70.00
Total	211	100.00	186	100	100.00
Marital status					
Never married	3	1.42	8	4.30	2.77
Married	147	69.67	138	74.19	71.79
Divorced	18	8.53	8	4.30	6.55
Informal union	2	0.95	4	2.15	1.51
Widowed	41	19.43	28	15.05	17.38
Total	211	100.00	186	100.00	100.00
Level of education					
No formal education	30	14.22	33	17.74	16.61
Primary education	50	23.70	25	13.44	18.88
Junior high education	28	13.27	34	18.28	15.61
Senior high education	50	23.70	50	26.88	25.18
Tertiary education	53	25.12	44	23.66	24.43
Total	211	100.00	186	100.00	
Employment status					
Unemployed	23	10.90	7	3.76	7.56
Employed	188	89.10	179	96.24	92.44
Total	211	100.00	186	100.00	100.00

> "We were made to understand that development was far catching up within this part of Abuakwa so the need to bring users together and develop a scheme for the area" (Respondent 2, Abuakwa Newtown, July 2020).

The preparation of local plans, as observed in Abuakwa Newtown and Krapa No.1, had minimum standard procedures that were followed. It was gathered through the interview with the PPD that the Town and Country Planning Act, 1945 (CAP 84) was used for the preparation of the local plan of Abuakwa Newtown. On the other hand, the LUSPA Act 2016 (Act 925) and the manual for the preparation of spatial plans prepared by the Ministry of Environment Science and Technology were used as guidelines for preparing the local plan of Krapa No.1.

The results revealed that the initiation and preparation of the local plans were undertaken if and when needed. In the case of CAP 84, the initiation and preparation of local plans are solely the responsibility of Minister in charge of Town and Country Planning and his board. However, the amendment of the Town and Country Planning Act of 1960 (Act 33) abolished the board and vested its powers to the TCPD through the powers given to the Minister. The case of the Manual for the Preparation of Spatial plans shows that the plan initiation is undertaken by the Statutory Planning Committee and the plan preparation could be done by traditional authorities (landowners), government agencies, the district assembly the area falls as well as developers or corporations.

It was observed from the interviews conducted in Abuakwa Newtown that the local plan was initiated and prepared by the Municipal Assembly through the PPD. The PPD realised the need to prepare a local plan as a result of the realization that physical development in the community was on the ascendency. The preparation process made use of consultations with the heads local governing authorities such as the Works Department, Development Planning Unit, and the Municipal Health Unit. The consultation of the PPD with the heads other local planning authorities leads to the appointment of the chairman of the committee, presiding members as well as the naming of the scheme for the area. The preparation of the scheme then went through a maximum of three stages before it was considered a final scheme. The PPD then put forward the scheme and provided notice of the deposit to the general public. The information about the deposit notice and public representations were then gazetted and published in two daily newspapers. This was to provide the general public the opportunity to inspect and assess the scheme. The scheme, after two months, was endorsed and approved by the Department.

It was observed from the interviews conducted in Krapa No.1 that the local plan was initiated and prepared by the World Bank through the traditional authorities. The traditional authorities had surveyors prepare base maps for the community after which a reconnaissance survey was undertaken. Stakeholder consultations were then conducted to gather the thoughts of the community on the local plan. The surveyors updated and subjected them to site analysis after which social, economic and land use data were collected. The arrangement of land uses in different ways in the area earmarked for the local plan was generated and subjected to a second stakeholder consultation. Comparisons was subsequently made to the schematic designs in the second stakeholder consultation to obtain a draft local plan, report and implementation plan. A third stakeholder consultation was then held to discuss the drafted plan and report's content through a public hearing. The plan and report were then finalised based on the comments and recommendations from the public and was consequently signed. However, because the contract was outsourced to consultants, the PPD subjected it the procurement laws to indicate the

terms of reference. The approval of the local plan was undertaken by the Spatial Planning Committee based on the recommendations of the Technical Sub-committee. The Spatial Planning Committee was tasked to coordinate and make decisions on the implementation of the local plan. All technical departments which the local plan fell under were given copies of the approved plan in order to assist the Spatial Planning Committee to monitor physical developments of the area.

From the findings, the plan initiation and preparation in the study communities revealed some differences. Local plan initiation in Abuakwa Newtown was by the Municipal Assembly whiles that of Krapa No.1 was done by traditional authorities with support from the Statutory Planning Committee. The preparation of the local plan in the case of Abuakwa Newtown revealed that the PPD together with the engineer, the officer of health and two other local government authorities of the Atwima Nwabiagya Municipality prepared the plan. Even though it is in line with the provisions of CAP 84, the preparation process highlights a rigid, expert-driven and general disregard for local (residents) participation in the planning process (Fuseini and Kemp, 2015; Poku Boansi, 2021). On the other hand, preparation process in Krapa No.1 revealed the engagement of technical and professionals such as the surveyors and spatial planners from the PPD. The preparation process in Krapa No.1 duly followed the guidelines proposed by MEST (2011). Processes such as base map preparations, reconnaissance survey, map updating and site analysis as well as the collection of socio-economic data and stakeholder consultations were all followed in preparing the local plans.

Again, different observations were made in Abuakwa Newtown and Krapa No.1 regarding the approval of local plans in the respective areas. The approval of the local plan in Abuakwa Newtown was undertaken by the PPD. However, prior to the approval, information on deposit notice and public representations were gazetted and published in two daily newspapers to provide the opportunity for the public to inspect and assess the scheme. The scheme after two months was endorsed and approved by the PPD. On the other hand, the approval process in Krapa No.1 was undertaken by the Spatial Planning Committee based on the recommendations of the Technical Sub-committee. A community durbar was then held to make the plans known to the respective communities and the public as a whole. The approved plan was published through mass media platforms after which it was handed over to the survey department for demarcations. At the plan implementation stage, the Spatial Planning Committee was tasked to coordinate and make decisions on the implementation of the local plans in Krapa No.1.

The discussion gives an insight on the fact that LUP over the years, has been steered and continues to be shaped by regulatory frameworks such as National Development Planning Commission Act, 1994 (Act 479), The National Development Planning (Systems) Act, 1994 (Act 480), the Local Government Act 1993 (Act 462) and the Town and Country Planning ordinance 1945. However, the LUSPA Act, 2016 (Act 925) has become the core legislation that governs LUP in the country and serves as the main tool used in directing the activities of the PPD in planning for settlements (Anaafo & Inkoom, 2016). Most importantly, the Act 925 as a guideline promotes participatory planning where stakeholders at the community level feel empowered as their views and interests are taken into consideration during planning. A study by Poku-Boansi (2021) revealed that 78 out of 105 homeowners in Ejisu asserted that inputs from identifiable stakeholders were not allowed in the land use process which resulted in the prepared plan not being adhered to. Considering the fact that about 80% of lands in the country are customarily owned (Abdulai et al., 2011; Arko-Adjei, 2011; Kuusaana and Eledi, 2015), the need to capture all the interests of these stakeholders in the planning process becomes paramount (Cobbinah and Aboagye, 2017; Jones and Stenseke, 2011); hence, the need to promote participatory LUP. This research posits that a participatory approach can ensure high level of improvement in LUP, enhance compliances and reduces haphazard developments and compliance costs, and promotes public acceptance of local plans.

Level stakeholders's satisfaction regarding their involvement in the preparation of local plans

Approximately 66% and 52% of the property owners were very satisfied with living conditions in Abuakwa Newtown and in Krapa No.1, respectively (Table 3). This was mostly the case because the physical accessibility to facilities in Abuakwa Newtown was relatively better than that of Krapa No.1 due to the nature of the LUP process. This supports the assertion of Biedenweg et al. (2017) that residents tend to appreciate government policies and regulations when it greatly influences the quality of their living conditions. Thus, satisfaction with LUP process plays a vital role in the satisfaction of property owners. Studies (e.g., Cobbinah and Amoako, 2012; Dambeebo and Jalloh, 2018) show that the idea of the development of a city or town can adversely affect the needs and personal satisfaction of residents in an area.

In addition, tenure security played a crucial role in every community and Abuakwa Newtown or Krapa No.1 are no exception. The results observed from Table 3 revealed 47% and 51% of the respondents to be very satisfied with the tenure security in Abuakwa Newtown and Krapa No.1, respectively. Also, 7% and 0.5% were extremely satisfied with their tenure security condition in Krapa No.1 and Abuakwa Newtown. This falls in line with the assertion that expert-driven LUP focus on instilling development that is strictly on the basis of putting forward land use restrictions whiles neglecting the protection of land rights (Chigbu et al., 2016). Again, the results revealed that 8% and 43% of property owners in Abuakwa Newtown and Krapa No.1, respectively, were very satisfied with the community mobilization process, respectively. It can be inferred that individuals will show interests in their built environment and urban planning processes, if their involvement is encouraged by sharing information and supporting their contributions.

Moreover, local governance is needed in every community to help property owners have sufficiently close interaction with individuals and institutions in government. Local governance improves upon ways to solve problems and manage public services as well as the representation of the community's views. This further serves as an indicator of the effectiveness of such government. From Table 3, even though the results showed that only 6% of property owners in Abuakwa Newtown were very satisfied with issues of local governance, 52% of property owners were rather very satisfied with local governance in Krapa No.1. Again, 6% of property owners in Abuakwa Newtown also revealed they were not so satisfied with issues of local governance, compared to only 2% in Krapa No.1.

Participation in land use planning process: Perspectives of respondents

Most (98%) property owners in Abuakwa Newtown indicated that they had never been involved in any form of LUP meeting. This results is consistent with earlier studies (Abugtsne, 2015; Baffour-Awuah et al., 2014; Boamah, 2014; Kleemann et al., 2017; Tasantab, 2015) that poor or the lack of participation of local citizens in the planning process contribute significantly to the problems of LUP in Ghana. The integration of stakeholders provides a meaningful avenue to make contributions to the LUP process. This brings forth an increased sense of responsibility from stakeholders as well as conflict mitigation and competition over land to achieve sustainable land distribution (Chigbu et al., 2016).

Majority of property owners in Krapa No.1 were involved in the LUP process. Even though about 32% of the property owners responded to have never been involved in the LUP process, the remaining 68% stated to have been involved in the LUP processes at least once. Subsequently, 89% of the property owners had the announcement of LUP meetings communicated to them through the chiefs and their elders. The remaining 11% were found to have their source of information through the assembly and unit committee members.

An Ordered Logistic Regression (OLR) was used to determine the degree of influence and significance between the level of satisfaction associated with the dimensions of satisfaction (dependant variable) and participation in the LUP process (predictor variable) in the study com-

Table 3
Dimensions and level of satisfaction.

Satisfaction level	Freq. of responses Abuakwa Newtown	Percentage	Freq. of responses Krapa no.1	Percentage
Living condition				
Extremely satisfied	28	13.27	19	10.22
Very satisfied	112	66.35	97	52.15
Somewhat satisfied	61	28.91	41	22.04
No so satisfied	10	4.74	17	9.14
Not at all satisfied	0	0	12	6.45
Security				
Extremely satisfied	1	0.47	13	6.99
Very satisfied	100	47.39	95	51.08
Somewhat satisfied	96	45.50	70	37.63
No so satisfied	14	6.64	6	3.23
Not at all satisfied	0	0	2	1.08
Community mobilization				
Extremely satisfied	1	0.47	22	11.83
Very satisfied	16	7.58	80	43.01
Somewhat satisfied	78	36.97	77	41.40
No so satisfied	79	37.44	5	2.69
Not at all satisfied	37	17.54	2	1.08
Local governance				
Extremely satisfied	0	0	16	8.60
Very satisfied	13	6.16	97	52.15
Somewhat satisfied	125	59.24	66	35.48
No so satisfied	60	28.44	4	2.15
Not at all satisfied	13	6.16	3	1.61

Source: Field survey, 2020.

Table 4
Ordered logistic regression for satisfaction with living condition and LUP in Abuakwa Newtown.

Number of observations = 204
LR chi2(5) = 78.12
Prob > chi2 = 0.0000
Pseudo R2 = 0.1742
Log likelihood = -185.14051

Variable	Coefficient	Standard Error	z	P>|z	[95% Conf. Interval]	
Satisfaction with living condition						
Plan initiation	-1.085528	0.646935	-1.68	0.093	-2.353497	0.1824412
Plan preparation	-1.36577	1.153771	-1.18	0.237	-3.62712	0.8955802
Plan approval	0	(omitted)				
Plan implementation	0	(omitted)				
Income	0.0014628	0.0001841	-7.95	0.000	-0.0018236	-0.0011019
cut1	*-5.468015*	*0.5500467*			*-6.546087*	*-4.389943*
cut2	*2.007623*	*0.3644903*			*-2.72201*	*-1.293235*
cut3	*0.846169*	*0.4221598*			*0.0187509*	*1.673587*

Source: Field survey, 2020.

munities. However, it was observed that predictor variables such as plan approval and plan implementation were omitted in Abuakwa Newtown because respondents indicated they had never participated in some stages of the planning process. Essential conclusions made were further subjected to (i) The relationships between satisfaction levels and the LUP process; and (ii) Whether these relationships were significant in determining the level of satisfaction with regards to property owner's involvement in the LUP process.

The model in Tables 4 and 5 revealed no statistically significant relationship between satisfaction with living conditions and the planning process from its initiation to its implementation in both communities. However, there was a statistically significant relationship between satisfaction with the living condition and income of property owners in both communities. Nevertheless, property owner's income levels in Abuakwa Newtown had a higher significant influence on their living conditions than in Krapa No.1. Works by the UN-Habitat (2009), Ghana Statistical Service (2008), and Cooke et al. (2016) have all highlighted that income levels have significant influence on the living conditions of individuals.

There was a statistically significant but inverse relationship (regression coefficient of -1.67) between satisfaction with tenure security and the planning process in Abuakwa Newtown (see Appendix 1). In effect, plan initiation of conventional approach to LUP in Abuakwa Newtown results in a decrease in satisfaction levels of property owners tenure security conditions in the community. The involvement of property owners in plan preparation had a regression coefficient of -3.58159 also suggesting a decrease in the satisfaction level of tenure security condition in the community. Notwithstanding this, results on satisfaction with tenure security in Krapa No.1 had a statistically significant positive relationship with plan initiation and preparation of a participatory LUP approach. The results showed a statistically positive relationship between plan initiation the level of satisfaction with tenure security conditions in the community (Appendix 3). This was affirmed by Ianniello et al. (2019),

Table 5
Ordered logistic regression for satisfaction with living condition and LUP in Krapa No.1.

Number of observations = 179
LR chi2(5) = 1.67
Prob > chi2 = 0.0000
Pseudo R2 = 0.0036
Log likelihood = -232.47274

Variable	Coefficient	Standard Error	z	P>|z	[95% Conf. Interval]	
Satisfaction with living condition						
Plan initiation	0.0563453	0.2892959	0.19	0.846	-0.5106642	0.6233548
Plan preparation	0.1844772	0.2864823	0.64	0.520	-0.3770178	0.7459721
Plan approval	-0.0587418	0.3172159	-0.19	0.853	-0.6804735	0.5629899
Plan implementation	0.335274	0.3233276	1.04	0.300	-0.2984365	0.9689846
Income	0.0000403	0.0001599	0.25	0.018	-0.0002731	0.0003536
cut1	*-2.406089*	*0.431921*			*-3.252639*	*-1.55954*
cut2	*-1.418105*	*0.3690056*			*-2.141342*	*-0.6948671*
cut3	*-0.2335822*	*0.3499914*			*-0.9195528*	*0.4523884*
Cut4	*2.512407*	*0.4215102*			*1.686263*	*3.338552*

Source: Field Survey, 2020.

who claimed that when individuals were involved in the planning process they felt more secured and accepted. Similarly, there was a statistically positive relationship between plan preparation the level of satisfaction with tenure security condition in the community. The results again revealed income to be significant and had a positive influence on satisfaction with tenure security with a regression coefficient of 0.0001139 (Appendix 2). LUP has been perceived to have a relationship with tenure security where they stimulate each other's outcome (Chigbu et al. 2016).

Further results on property owners' satisfaction with community mobilization during the plan initiation in Abuakwa Newtown revealed a significant level of influence in the LUP process. A p-value of 0.000 and an ordered regression coefficient of -4.235465 indicated that there was a 4.34 decrease in the level of satisfaction with community mobilization during plan initiation (Appendix 3). There was contrary result in Krapa No.1 (Appendix 4). This further affirms the studies of Cops (2016) who viewed community mobilization as a kind of participatory engagement that aims to integrate the entire community, both as people and groups, which include the disadvantaged people, in identifying issues, proposing solutions, and taking action on their own. The plan preparation and implementation in Krapa No.1 revealed a statistically significant level of influence between the property owner's satisfaction with community mobilization. A regression coefficient of 0.1606176 from the ordered regression model for plan preparation indicated the level of satisfaction with community mobilization increased by 0.16 when a participatory approach was adopted in the plan preparation of the land use plan. Again, a regression coefficient of 0.7441413 for plan implementation also indicates that there is a 0.74 increase in the level of satisfaction with community mobilization when a participatory approach is adopted in the implementation of land use plans. However, it was surprising to realize that plan initiation and plan approval were statistically insignificant with regards to satisfaction with community mobilization Krapa No.1.

On the satisfaction of property owners with local governance during plan initiation, the survey result indicated a significant but negative influence in the LUP process in Abuakwa Newtown. With a p-value of 0.000 and an ordered regression coefficient of -3.85771 indicating that there was a 4.86 decrease in the level of satisfaction with local governance and plan initiation in a non-participatory approach to LUP (Appendix 5). Krapa No.1 on the other hand where the participatory approach was adopted revealed a statistically significant level of influence between property owner's satisfaction with local governance and the LUP process (plan initiation, preparation and implementation) (Appendix 6). A regression coefficient of 0.704515 from the ordered regression model for plan initiation indicated that the level of satisfaction with local governance increased by 0.70 when a participatory approach was adopted in the plan initiation of the land-use plan. Also, a regression coefficient of 0.4589624 from the regression model for plan preparation indicates that the level of satisfaction with local governance will increase by 0.46 when a participatory approach was adopted in the plan preparation of the land use plan. Again, a regression coefficient of 0.2196428 for plan implementation also indicated that there was a 0.22 increase in the level of satisfaction with local governance when the participatory approach was adopted in the plan implementation of a land-use plan.

Conclusion

The aim of the paper was to examine stakeholders' satisfaction with conventional and participatory LUP approaches within the context of policy and practice. This was done through examining the nature of LUP processes used to prepare local plans as well as the level of satisfaction of stakeholders regarding their participation in local plan preparation in the Atwima Nwabiagya and Ejisu Municipalities. The guidelines for the LUP process in Ghana was adopted from the LUSPA Act, 2016 (Act 925) as a policy document after which stakeholders were engaged in discussions to authenticate its practicality at the local level. The satisfaction of stakeholders in relation to the LUP was analysed using dimensions such as their living conditions, tenure security, community mobilization and local governance.

The findings from the study revealed that conventional LUP process from plan initiation, preparation and approval had minimal involvement of traditional authorities and no involvement of property owners. The initiation of the local plan was undertaken by the planning authority (i.e., PPD). By this, key stakeholders such as traditional authorities and property owners are made aware of the exceeding level of development and the need for the preparation of a local plan. The subsequent local planning process revealed that the municipality through the PPD follow the guidelines for local plan preparation and approval. However, in the Ejisu Municipality where a participatory approach was adopted, the results showed extensive collaboration between the planning team and relevant stakeholders such as the traditional authorities (specifically, chiefs or local community leaders who at times double as landowners), property owners/developers and the entire community at large with the help of the PPD. The traditional authorities (chiefs) who are custodians of lands in consultation with surveyors prepared base maps that hinge on the inputs of community members. They are then presented to the planning department for assessment based on the guidelines of the LUSPA Act, 2016 (Act 925).

The level of satisfaction of property owners were measured based on dimensions such as living conditions, tenure security, community mobilization and local governance. The results revealed high levels of

disparities regarding community mobilization and local governance in both communities. The practicality of LUP in Ghana, which is dominated by the conventional approach to preparing land use plans needs to be assessed thoroughly. The study recommends that the absence or limited involvement of the ultimate beneficiaries in the land use planning process who are most of the time excluded should be addressed as it inhibits efforts to attain inclusive planning. Local governments should also provide their Physical Planning Departments the requisite financial and human resources during all stages of the LUP process to ensure that the final outputs obtained respond to the needs of the people. This suggestion is based on the fact that it is only when urban planning agencies, local governments and local stakeholders work together that they can address the many urban planning challenges confronting cities in developing countries. Again, having revealed that communication plays an important role in the preparation of land use plans in both Abuakwa Newtown and Krapa No.1, the planning authorities, as well as committees' setup for LUP, must adopt strategies that will improve communication especially announcement of LUP meetings. The communication strategy must be able to reach a majority of community members who will be ultimately affected by the land use plan to actively participate in the process.

There is also the need for a more participative and collaborative approaches in which actors develop shared land use planning goals and agree on the means to give effect to those goals. This is deemed relevant considering that the process is iterative and evolutionary as actors' preferences and plans change in response to emerging system features. Overlapping and multilevel governance arrangements could involve public and private and non-government collective-action institutions. The use of urban space could be regarded in some respects as a "common-pool resource" – a good whose use by one person subtracts from the use available to others, but which is difficult to exclude potential beneficiaries from enjoying. Hence, policy recommendations should consider this such arrangements and effective integration of the decisions of all relevant stakeholders.

Lastly, based on the findings of the study it is suggested that a key focus of land use planning interventions and policy process should be positively influencing the evolution of state institutions. This is because the state/government co-evolves with society and should thus not be considered separately. While normative codes and the eco-structure in which people operate are important for bottom-up processes, top-down approaches should be seen as an evolving process that works alongside evolving institutions. In all of this, the government plays a key role in providing a balance amongst the various views and coming to a compromise; and, to facilitate this, relevant state institutions should be shielded from direct political pressure.

In spite of the important contribution of the study, some limitations were encountered and are briefly discussed. First is the representativeness of the institutional respondents, since the study focused on primarily two institutions to collect data on land use planning. This is highly inadequate considering the number of institutions that are involved in land use planning in Ghana. Therefore, the results had to assume that the data collected from these institutions were enough justification for the assessment of the LUP process in both study areas. Another aspect that was not covered by the study was the spatial manifestation of the land use plans and how stakeholders' satisfaction impacted them. The study therefore failed to assess the actual physical development of the planned area to further corroborate stakeholders' satisfaction with regard to their involvement in the LUP process.

It could therefore be beneficial that future research explores, holistically, all stakeholders involved in the LUP process and create a set of standardised metrics for their inclusion. This could help urban planners and policy makers to further understand the dynamics of LUP from different stakeholders' perspectives. It could also be worthwhile that studies be undertaken on the geospatial development of land use plans to corroborate the satisfaction of stakeholders in spatial development since LUP has a physical manifestation.

Declaration of Competing Interest

None.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ugj.2023.06.002.

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