

**TERRITORIAL PLANNING AT COMMUNITY LEVEL IN MOZAMBIQUE:
OPPORTUNITIES AND CHALLENGES IN A CONTEXT OF COMMUNITY LAND
DELIMITATION**

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Responsible Land Governance: Towards an Evidence Based Approach

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Abstract

This paper highlights the potential methodological approaches that can be integrated in a fit-to-purpose administration system, particularly in what regards community land delimitation, to improve land use and territorial planning at community level. The intention is to bring light of its importance to development practitioners and encourage them to look at rural communities as dynamic settlements that gradually will become urban settlements. Land dynamics in Mozambique are complex, as they are directly linked to social, economic and environmental aspects. Most of the challenges that we face in the land sector arise from population growth, increased land-based investments, infrastructure development (roads, bridges, electricity, etc.), climate change, and poorly led resettlement processes and institutional capacity limitations. Since 1997, Mozambican population accounts for a 40% growth rate. This will, undoubtedly, lead to the world's similar unprecedented increase demand for food, water and energy, as mentioned by Kring (2012). These factors escalate the challenges to the land administration system, and some, as stated by Monteiro (2016), include: (i) the need of territorial planning, with a balanced and sustainable use of land and natural resources; (ii) Community accountability, recognizing the role of rural communities in land administration and management systems; and, (iii) efficient land information management, to ensure accessible, reliable and effective information for land use planning, management and economic growth. Based on these development trends and challenges, it is important to consider the integration of a community-based territorial planning approach in land delimitation processes, given to the fact that the current land use plans neither take in account the land use dynamics at community level, nor empowers those same communities to engage into sustainable territorial planning approaches. The reflections presented in this document are based on lessons learned from implementing community land delimitations for almost a decade, in Mozambique.

Key Words: (1) Territorial planning; (2) Community land delimitation; (3) rural and urban development; (4) land administration; (5) sustainability



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1. INTRODUCTION

Mozambique has been progressively improving the land administration system in order to address with various challenges deriving from the need to secure land rights to promote sustainable land-based investments. A good example on progress in securing land rights is the Government programme “Terra Segura” (“Secured Land”), launched in April 2016, aiming to register a total of 5 million *in good faith land occupancy* rights and, about 4000 community and delimitations, nationwide. Additionally, community lands are also being registered and introduced at the national land cadaster with additional support from other partners such as the Community Land initiative (iTC). Despite all these efforts, challenges to the country land administration still persist, in both planning and cadastral processes.

The 2015-2035 Mozambique’s development strategy is very much linked to the Rural Development Strategy issued in 2007, which aimed at transforming the composition of social, economic, political, cultural and environmental structure of rural areas (Conselho de Ministros, 2007). Mozambique’s development strategy focuses on 4 main pillars, namely: (i) Development of human capital; (ii) Productive-based Infrastructure development; (iii) research, innovation and technologic development; and (iv) institutional coordination. Considering the fact that, the economic growth in Mozambique has been driven by agriculture investments in agriculture, energy, infrastructure rehabilitation, manufacturing and mining, these strategies constitutes an instrument to guide Mozambique Development process (The World Bank, 2010). Somehow in-between these two strategic documents (the Rural Development Strategy and the Mozambique Development Strategy), the state has been promoting growth development poles, based on the spatial development initiative initiated by NEPAD and the African Development Bank, to boost economic growth (The World Bank, 2010). The objectives of an integrated growth poles strategy for Mozambique includes: (i) Enhance sub-national competitiveness; (ii) Develop local/indigenous enterprises by fostering business linkages between large investments and MSMEs; (iii) strengthen local institutional capacity for planning, coordination, management and service delivery; (iv) upgrade urban infrastructure; and (v) strengthen local governance and management of environmental and social impacts of large investments (The World Bank, 2010). Most of these objectives have impacts on land use, and its dynamics, considering that the majority of people depend on land for reaching its basic development needs.



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Land dynamics in Mozambique are complex, as they are directly linked to political, economic, social and environmental aspects. Today, most of the country challenges on land sector are caused by population growth, increased land-based investments, the development of the country's infrastructure, climate change, poorly led resettlement processes (USAID, 2004) and, weak or limited institutional capacity, in general. According to the World Bank's data on Mozambique, population in Mozambique has grown 40%, from 1997 to 2015, and its density rose from 21% to 35% per square km, in the same period. Global Population growth leads to unprecedented demand for food, water and energy (Kring, 2012), and Mozambique is following the same pattern. Facing all this social, economic and environmental transformations, its development strategy needs to be in place to ensure a better coordination of development (Ministério de Planificação e Desenvolvimento, 2014).

Setting an efficient, sustainable and reliable land administration system, will be critical to ensure the implementation of the second pillar under the Mozambique Development Strategy. As stated by Monteiro (2016), some of the land administration challenges include: (i) Territorial planning, for a balanced and sustainable land and natural resources use, while improving livelihoods; (ii) Community accountability, recognizing the role of rural communities in land administration and management systems; and (iii) information management, to ensure accessible, reliable and efficient information for land use planning, management and economic growth. All the above challenges need to be addressed under a context of social, economic and environmental development that Mozambique is willing to achieve. Additionally, sustainable land-based investments face challenges related to (i) incentives for sustainable investments; (ii) security of customary rights; (iii) enforcement of socioeconomic and environmental safeguards; and (iv) Public awareness and participation, which includes participatory land use planning, as defended by Dalupan *et al.*, (2015).

In order to ensure a harmonious spatial development between people and its environment, the Government of Mozambique introduced the Territorial Planning Law in 2007, followed by its Regulation in 2008. This legislation follows the principles of rational use of land and natural resources, environmental conservation, balance between quality of life in rural and urban areas, livelihoods' improvement of social infrastructure and housing. The legislation describes and regulates the use of tools and approaches to promote land use plans at National, Provincial, and District level. Some of the principles stated in the referred legislation are in line, in terms of context, with the FAO Voluntary Guidelines to Responsible Governance and Tenure (FAO, 2012), specifically in what regards to "Regulated spatial planning". The major outcome from the



above legislation was the systematic elaboration of District level Land Use Plans (PDUTs), and territorial plans at municipality level.

District Land Use Plans are meant to be tools that ensure territorial planning, and have the objective of identifying specific areas for different uses as well as to establish rules for occupancy and the use of the soil and natural resources. This statement is consistent with Shortle & Bergstrom (2005) and The World Bank (2012), who consider that land use reflects and determines both where the various economic activities take place and, how communities develop. However, land use plans need to reflect the reality of those communities, so it can effectively serve as an orienting development guideline.

Considering that today, the Mozambique has made a huge progress in registering community land rights, where iTC contributed so far with 655 community land delimitations, covering an estimate of 7 million hectares, there is enough information to introduce the concept of community level land use planning. This paper tries to highlight additional information for decision-makers, territorial planning experts and district administration officials, by listing opportunities and challenges to deliver a community level land use and territorial planning approach, as a mechanism to improve district level land administration, while reducing conflicts and promoting a sustainable use and management of land and natural resources. Due to infrastructure development, associated with population growth, some of these communities, especially those close to urban areas, are rapidly transforming from rural to the urban areas, requiring complementary and additional land use and territorial planning tools and approaches to respond the challenges.

According to the National Agro-ecologic survey, commissioned by the Ministry of Agriculture in 2008, an estimate 6.9 million hectares of arable land were available for land-based investments. At that point, there were no clear indications in which communities these available lands where, making it difficult to orient investors. Research conducted by iTC in 2015 on District Level Land Administration found that the territorial planning was under responsibility of the SDPI (Planning and Infrastructure District Services) while land rights registration were under the responsibility of the SDAE (Economic Activities District Services). The current and future land dynamics might require a more efficient coordination between these two district level entities, especially if land needs to be available to respond to the basic needs of Mozambican people, in a social, economic and environmental context.



As mentioned by (IFAD, 2015; UN-Habitat, 2015) infrastructure investment and development has been one of the drivers of rural urbanization. Despite economic achievements in the last decade, Mozambique shall invest US\$ 1.7 billion per year in infrastructure (power, transport, water and sanitation) to catch up with the rest of developing world (AICD, 2011). Nevertheless, the infrastructure investments delivered so far, especially in growth poles, have somehow impacted on spatial development. Shortle & Bergstrom (2005) stated that spatial growth of cities and development of adjacent rural areas has impacts on land use, especially those related to land use planning. Furthermore, the development of social and economic infrastructures (roads, railways, electricity, schools, market centers, etc.) also accelerated the urbanization of rural areas, especially those close to main urban areas. Territorial planning is required to harmonize all these development trends and ensure a harmonious development.

This paper discusses the need and the opportunity to expand territorial planning to the community level, sustained by the principle of delivering territorial planning at community level might have a positive impact in the country's land administration system, and consequently, as mentioned by RICS (2011), contribution on improved food security, land use planning, economic growth, improved land resource managements, as well as to reduce land conflicts. Land administration needs to be designed to fit the people's interest and their relationship to land (Enemark *et al.*, 2014). The paper highlight the potential methodological approaches that can be integrated in a fit-to-purpose land administration system, for improving land use and territorial planning, linking district level territorial planning with the community level, based on actual and future land dynamics and based on lessons learned by the Community Land Initiative's (iTC) from its experience in delivering community land delimitation, and from local evidences of weak territorial planning.

2. URBANIZATION

Estimates from UN-Habitat (2015) indicate that more than 54 % of the world population lives in urban areas, and that in 2050 it might reach 66 %, where it is expected that 50% of the Africa continent turn urban (Dias, 2014). According to The World Bank (2009), three factors may influence urbanization, namely: (i) positive net migration to urban areas; (ii) natural increase of population in urban areas; and (iii) re-classification of rural settlements into urban. According to UN projections, an estimate of 17 million people could be living in urban areas in Mozambique by 2030 (The World Bank, 2009) in comparison with about 8 million in 2014 (United Nations, 2014). Mozambique population grows annually at an average estimate



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of 3.0 % (INE, 2015; INE, 2010), on which a 3.0 % of urban growth and 2.8 % of municipality population growth (The World Bank, 2009). These projections already challenges the government to increase investment in education, health, water and sanitation, transportation and many other social development indicators, as stated in the national development strategy.

In Mozambique there are various definitions of “urban”, which make it difficult to list in the context of this document. However, key factors that determine a urban settlements includes: (i) population density; (ii) use of urban soils, sanitation, transportation and communication infrastructure development and housing conditions; and, (iii) political, economic, socio-cultural, number of industries, trade activities, education, etc.

Urbanization in Mozambique is also being influenced by Mozambique’s achievements in infrastructure development, which includes: the rehabilitation of roads; attraction of the private sector to operate in main railways; expansion of wells, boreholes and traditional latrines; good utility performance and service quality in the electricity sector; and liberalization of the mobile communications market (AICD, 2011). When the Rural Development Strategy was designed in 2007, there was already a prediction on urban-rural competition increase, as result of accelerated urbanization (Conselho de Ministros, 2007).

The combination of population growth and infrastructure investments increases the opportunities for urbanization. Nevertheless, territorial planning continues to be a challenge to Mozambique population growth and to urbanization. Examples and/or evidences of the evolution from rural to urban settlements can be found in most parts of Mozambique, through satellite imagery analysis. Figure 1, presents a satellite illustration of the evolution from rural to urban of an area in Manica province, from 2006 to 2016, reflecting also a clear evidence of weak territorial planning.

Figure 1. Example of rural to urban settlement evolution in Manica province

The urbanization challenges are happening both in cities as in rural areas. The difference is the lack of infrastructures in the later. Spatial analysis illustrate that some of this developments are happening in some of communities delimited by the iTC.



As the country experiences unprecedented investment in public infrastructures, especially in rural areas, there is much more probability for transformation of rural to urban settlement. However, new urban settlements require adequate and sustainable physical planning. Territorial planning can enable governments to better address geographical or rural-urban inequalities to better integrate the social, economic and environment dimensions to development process (IFAD, 2015).

3. TERRITORIAL PLANNING IN MOZAMBIQUE

According to the Mozambique Territorial Planning Law, territorial planning is defined as the process of elaboration of plans that shapes spatial forms of relations between humans and its physical and biologic environment, regulating its rights and forms of use and occupation. This definition is in harmony with the ones mentioned by (IFAD, 2015); (UN-Habitat, 2015).

Territorial planning is considered one of the main development challenges for Mozambique for the period 2015 – 2035. The strategy focus on the Government’s action to improve land use, through the consolidation of zoning, as a path to identify specific areas for urban development, industries, natural reserves and other infrastructures (Ministério de Planificação e Desenvolvimento, 2014). The strategy advances four key priorities, namely:

- Elaboration of a master territorial development plan;
- Collection of technical and detail information to adjust spatial plan, based on priorities;
- Adjustment of spatial plan;
- Territorial delimitation of infrastructures in urban and rural areas, based on development needs.

3.1 Legal and institutional framework

The issuing of the Territorial Planning Law (2007) and, later, the decree 23/2008, that sets up the its Regulation, marked an enormous progress, considering the pressure from investors over land that Mozambique have been gradually and more intensively facing over the last 10-15 years, in particular. Considering that territorial planning aims to influence and regulate the use of space (Norfolk & De Wit, 2009), it requires integration with other sectorial legislation that has an influence on land use systems



nationwide. The territorial planning legislation sets the basic guidelines to operationalize the territorial planning policy at national, provincial and district level. It also describes different planning tools that are required for each administrative level. Table 1 illustrates the different instruments required for territorial planning in Mozambique at different levels.

Table 1. Territorial planning instruments in Mozambique

Territorial planning instruments in Mozambique, as shown in Table 1, are only available up to the municipality level. District Land Use Plans are the lowest available instrument for land planning, but are still in its initial stages of implementation. This brings challenges, especially when comes to integrated community level land use plans into District level territorial planning. According to Tanner, *et al.*, (2015), district land use plans should be an aggregation of small (community level) land use plans, which could also be subject to adaptations, depending on the higher level planning requirements.

The territorial planning legislation emphasizes the rights of local communities to access the information of the planning tools, as well as their right to be properly consulted, during the designing process of the plans.

At National level, territorial planning falls under the jurisdiction of the National Directorate of Territorial Planning from the Ministry of Land, Environment and Rural Development (MITADER). At Provincial level, it is governed by the Provincial Directorate of Land, Environment and Rural Development. At District level, this responsibility fall under the District Services for Planning and Infrastructure (SDPI). This current institutional arrangement is hindered by capacity, both human and material, limitations. A small research conducted by the Community Land Initiative (iTC) in 2015, covering 22 Districts and 8 Municipalities, recorded evidences of limited technical capacity, weak cadastral (spatial) information, unsuitable tools and equipment among others as the main problems faced by District authorities in particular, for their level of planning, corroborating the findings by Norfolk & De Wit (2009).

3.2 District level land use plans

According to the Law on Territorial Planning (Law n^o. 19/2007), territorial plan has as a general objective ensuring the organization of the national space and the sustainable use of natural resources, considering legal, administrative, cultural aspects and also ensure favorable material conditions for social and economic



development of the country, including protection and conservation of the environment. According to UN-Habitat (2015) and (IFAD, 2015), territorial planning shall contribute to sustainable development, integrating social, economic and environmental dimension.

After almost ten years since the territorial planning legislation was issued, the country made a huge progress on delivering District level land use plans to almost all districts. Table 2 presents the summary of number of land use plans available in each province, covered by iTC interventions.

Table 2. Summary of District Land Use Plans available in iTC working provinces.

Despite its availability as shown in table 2, copies of district land use plans are not being easily accessible, contrary to what is assumed in the legislation. Furthermore, District Level Land Use planning has not been as effective as expected, since it neither seem to respond to the local needs, nor to the challenges posed by the pressure over land and territorial development requirements. Potential reasons for this could be related to weak integration of spatial dimension attributes during the elaboration of the plans, as referred by (Macarringue *et al.*, 2015) and weak integration of community level spatial and development plans details. Additionally, the lack of information about land use and about the location and distribution of valuable resources, also contributes negatively to the inefficient use of District Land Use Plans, as instruments for decision-making at District level, especially where it comes to attracting investments.

On the other hand, it is evident that the current Land use plans do not effectively reflect the present forms of land occupation, including community and individual rights (Norfolk & De Wit, 2009; Macarringue *et al.*, 2015) making it difficult to deliver a solid guideline for different stakeholders to make a good use of it. The result from a commissioned nationwide agriculture zoning in 2008, showed that the country had available an estimate of 6.9 million hectares of land for investments. This information is not clearly reflected in the District level land use plans, evidencing an example of misuse of available valuable information for territorial planning.

Designing land use plans, requires a systematic and documented approach that includes different decision-making steps related to type, geographical area, scale, problems, opportunities and alternatives (UN-Habitat, 2015; FAO, 1993). The level of detail will determine the applicability of the land use plan. As stated by Norfolk & De Wit (2009); Macarringue *et al.* (2015); land use plans were based on stakeholders



auscultation without spatial integration. Very little spatial information are available in the district level land use plans, challenging its functionality at district and community level, particularly when delivering information for development of new urban areas.

District level land use plans are only useful to guide policy makers and planners in setting a suitable development approach. District level land use plans do not reflect the real and actual use at community level (figure 2), making it difficult to deliver a fit-for-purpose solution on the ground, especially in scenarios of population growth and land and natural resources reassurance.

In addition to all the complementary descriptive information, land use plans are compilation of various thematic (vegetation, tourism, mining, etc.) maps, on which most of them results from outdated information. Figure 2 illustrate some of the thematic maps used in district land use plans.

Figure 2. An example of a thematic map (actual land use) used District land use plan

4. COMMUNITY LAND DELIMITATION

Recognizing customary rights, as stated by the Mozambican Land Law, opens opportunity for community involvement in virtually all land administration and management processes, especially through *community consultation*. The customary rights have been registered through a community land delimitation process that involves various procedures stated in the technical annex of the Land Law Regulation.

Community land delimitation has proven to be an important contribution to the land administration system in Mozambique, as it improves the cadastral database, and empowers rural communities in engaging into sustainable land use practices (Monteiro, 2016). ITC has been supporting the Government in delivering community land delimitations since 2006. Summary of approaches and results delivered by iTC is presented in the box 1.



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Box 1. Community Land initiative (iTC) – Objectives and Results

From 2006 to 2014, Community Land initiative (iTC) was a Project funded by a group of donors (United Kingdom, the Netherlands, Switzerland, Sweden, Denmark and Ireland) and Millennium Challenge Corporation (for the period of 2009 to 2013) to implement activities related to secure community land rights in the provinces of Cabo Delgado, Gaza, Manica, Nampula, Niassa, Sofala Tete, and Zambézia.

From May 2014, with the same donors, iTC is the process of institutionalization, aiming to become a Foundation. The initiative main objective is to support the Government of Mozambique to secure community land use rights, through registration in the cadastral services of their limits and rights, as a contribution to promote rural development. Community Land initiative tends to elevate and empower community based organizations so they can become active actors of their development, leading the planning and implementation of activities that promote sustainable land and natural resources use and management. Main activities of iTC includes (i) Land delimitation and demarcation, based on the land law; (ii) Capacity building of rural communities; (iii) Sensitization and awareness rising in regards to land and natural resources management. These activities are implemented in a contract arrangement with selected service providers in each province.

Results from iTC support since 2006 to November 2016 are as follow:

Number of Community delimitations: **679**

Number of hectares secured through community delimitations: **7,249,030**

Number of land demarcations: **633**

Number of hectares secured through land demarcations: **48,417**

Number of community members supported: **1,893,607**

Percentage of women supported as community members: **53 %**

Some key lessons from iTC support in community land delimitation includes: (i) empowerment of rural communities as key players in land and natural resources management, including their involvement community consultation; (ii) land Information management for promoting sustainable land-based investment and appropriate land administration; and (iii) synergies to maximize the effects of securing land rights at community level.

Recently, as part of its sensitization campaigns, iTC has been advocating about the concept of “Delimitation first”, as a basic procedure to empower rural communities for subsequent land-based interventions (Monteiro, 2015), including territorial planning, considered one of the challenges of the land governance system in Mozambique (Monteiro, 2016; Norfolk & De Wit, 2009). Delivering “Delimitation first” maximizes the opportunity of organizing the community to deal with future challenges inside the community, including territorial planning. A suitable “delimitation”, leaves appropriate knowledge of rights, duties and development opportunities, as well as the setup of a community based organization that will lead land and natural resources management. Figure 3 illustrates the different stages of community land delimitation in the iTC approach.



Figure 3. The community land delimitation steps

The products from a delimitation process, when combined with other complementary information, can turn out into valid information assets for land use planning at local community level. Social preparation is one the most valuable inclusive approach under the delimitation process that is source of valuable and useful information.

4.1 Connecting the dots: Linking community delimitation to territorial planning

When the territorial planning legislation was introduced in 2007, very few community delimitations had been undertaken in Mozambique, despite a national community land delimitation movement had already started in late 1990's. Since 2006 to date, iTC has been the institution that has contributed with more community delimitations in the country. Figure 4, illustrates de evolution of community land delimitation delivered by iTC. The last ten years of territorial planning has been also followed on the other side by evolution in community land delimitations, which brings community-based data and information that could improve territorial planning approaches.

Figure 4. Evolution of community land delimitation (iTC data)

Through the delimitation process, rural communities, under specific boundaries became a reference unit in local plans and official records. After a delimitation exercise (with Social Preparation) the communities end up with an organizational structure, a set of development goals and priorities, and above all a shared vision on land use management scenarios, that are often not duly captured due to the district level planning approach. The delimitation process brings various opportunities to feed territorial planning on both community, district and provincial level.

As mentioned above, district level land use plans do not capture community rights, nor the details of different land use forms as perceived at community level, making it difficult to deliver a harmonized community based territorial planning based on needs. As mentioned by (Matt McIntyre and Associates, 2007), land planners shall recognize and accommodate competing or multi-layered and co-existing interests, as result of the relationship between people with land and other natural resources. Besides, most



of these relations happen at village and community level. Economic growth and development causes changes in land use, and this dynamics needs to be captured during the territorial planning process.

Community land delimitation delivers a variety of tools, which can be relevant sources of data for territorial planning:

- The Community Development Agenda: that results from a detailed assessment of the community, based on thematic information. Some can even be georeferenced to give appropriate geospatial representation, which documents development needs through the vision and aspirations of the community;
- A Context Detailed Land Use Zoning: a planning tool for definition different land use typology in the delimited community;
- A Context Land Use Plan: a planning tool, that illustrate and describes suggested land use plan, based on the current land use, and considering potential development trends (population growth, resources usage, national/districts plans and investments plans)

The above mentioned tools, combined with additional geospatial and complementary local descriptive information, could be the missing cluster of information that makes district level territorial planning more realistic and effective. Under the “Delimitation first” approach, iTC has established a partnership with National Directorate of Land (DINAT) as the regulator and EXI, a private firm responsible to design the Land information and management system – SiGIT, to implement a pilot project aiming at combining community land delimitations with the regularization of good faith land occupancy methodologies under the Government’s programme “Terra segura”. The harmonization of these methodological approaches will, hopefully contribute to standardize procedures and improve the records in the communities’ cadaster, while improving the availability of geospatial information regarding the land use at community level, that can be useful to improve territorial planning when integrated into district plans.

5. DELIVERING COMMUNITY BASED TERRITORIAL PLANNING

As defined in the Mozambique Territorial Planning Law, and supported by Matt McIntyre and Associates (2007), territorial planning is about people and their relation with land and other natural resources. The



recognition of customary rights was a great achievement in involving communities in the development processes. Communities are gradually being considered the center for development planning, especially at district level. Therefore, understanding the main opportunities and challenges to deliver the community territorial planning, in the context of land delimitation might trigger the reflection and discussion for its effective implementation in a short/medium term.

The Government economic, social and environmental development challenges are visible, and somehow reflected in the Mozambique's development indicators. The pressure posed by land and natural resources-based investments is real, and require a solid land management system that brings together private investors and rural communities into a common ground with what regards fair sharing of benefits. The expansion and transformation of rural to urban settlements, as a result of factors, such as population growth and infrastructure development, require urgent attention of the territorial planning sector, to avoid initiating and perpetuating the same problems that cities face today, as reflection of poor forward-looking attitude on urban planning. A balanced economic growth, where environment issues are considered under a climate change reality, need to be foreseen by policy makers and planners at national, provincial and district level, where decisions are sustained by updated environmental information from the local level.

The opportunities and challenges presented bellows, are based on iTC's experience in delivering community land delimitations throughout the country in the last 10 years, and are sustained on the challenges perceived as results of land use plans elaborated so far at district level.

5.1 Opportunities

5.1.1 Social Preparation and zoning

Community land initiative (iTC) delivers an added-value approach, compared to the regulated delimitation procedure in the technical annex, by adding Social Preparation and capacity building of Natural Resources Management Committees. These two steps in the delimitation process are participatory, and constitute the basis for community ownership. Social preparation is the core process of iTC delimitation approach. It is a natural resources management-planning tool, through which rural communities are engaged and empowered to define their on development priorities based on the use and management of land and natural resources.



Social preparation has the objective to empower rural communities to understand the opportunities provided by natural resources they have within the boundary, so they can lead the land and natural resources management for their development. Social Preparation encompasses various steps, including a detail community assessment and mapping, that makes a useful source of information for territorial planning. During the social preparation, a zoning process occur, which has the objective to identify different types of current and future uses of land (agriculture, habitation, cattle, mining, etc.). This zoning, in most of the cases are conducted based on community information, but it can be improved by using fair resolution satellite images. The zoning process at community level, as tool for land use plan (Norfolk & De Wit, 2009) can be an information asset to deliver a community level territorial planning, therefore, improving information land use plans at district level.

The elaboration of maps (social, resources, infrastructure, etc.) under the social preparation phase can be highly improved, using satellite images to cadaster various features at community level. This improvement will automatically improve the dataset at community level, creating an opportunity to build a specific geospatial cadastral dataset at community level that can be useful in the territorial planning at community level. As mentioned by (Macarringue *et al.*, 2015) the use of spatial dimension can improve land use planning.

Community development agenda are the product of social preparation. It is a document where all the community development aspirations are compiled, as result of participatory prioritization approach. The agenda is supposed to be used by the communities as an orientation tool, particularly during community consultation sessions. As part of the District development planning it is a useful tool, since it could reduce the cost for additional assessment at community level. Community development aspirations, can be considered as useful information for defining parameters of territorial requirements needs to satisfy these development needs. Therefore, Agendas are complementary tools, and source of information for territorial planning at community level.

5.1.2 Local engagement - Natural resources management committee

According to UN-Habitat, 2015, it is important to engage rural communities and partners with local authorities to improve territorial planning. Delivering territorial planning at community level will definitely



require a consistent, capable and dynamic group of people on the ground that will not only input in the elaboration of the plans but will, most of all, ensure their participation in the monitoring and implementation of the locally produced territorial plans.

During the delimitation process, a natural resource management committee (NRMC) is established and trained to support the local leadership in land and natural resources management activities. These groups, constituted by an average of 9-10 board members and other many operational members, are trained to engage with rural communities in maximizing benefits from sustainable management of land and natural resources. With appropriate and specific training in territorial planning tools and methods, these same groups could be engaged in all planning cycle, from design process to the monitoring. Capitalizing these local organizational structures might enhance data collection and monitoring processes, if community territorial planning is considered. As noted by (IFAD, 2006), the success of community based approaches, depends on the capacity and effectiveness of the communities to better manage their resources. Therefore, they need to enforce accountability throughout the development processes, so that ownership and leadership are promoted among community members.

5.1.3 Land information and management system

An effective land cadaster and land information systems can have multiple benefits, including improving the territorial planning process. Efforts made by the Government of Mozambique to establish the Mozambique Land information and Management System (SIGIT) will impact positively on the land administration system. Furthermore, considering that land cadastral information, specially related to land rights, are the most missing information in most of the land use plans (Norfolk & De Wit, 2009), an effective land use information management system is potentially an instrument to ensure and improve territorial planning.

Assessing land rights (customary and acquired) is fundamental to reduce the gaps on information when delivering territorial planning, and this information can be easily aggregated at community level during a delimitation process and, through the land information and management system in place. For planning purposes, an updated cadastral system will contribute both to physical and spatial improvement and to the economic and social development of the communities, considering taxations, infrastructure development and environmental protection. The land cadaster shall include all the *good faith occupancy* registration that



is being promoted by the “Terra segura” program, since it will be generating additional information about rights, changing the land use pattern at local level.

Other complementary land use information is also relevant and should be managed through, or associated with, a land information and management system, reducing the gaps of information required to deliver a local based territorial planning. Information such as the mining cadaster, provided by *flexicadastre*, and biodiversity habitats, such as the one elaborated by Siteo *et al.* (2015) can be easily integrated into the land management system, improving the database of information at both community and district level. Infrastructure development plans, such the one presented by (MPD, 2014) for Mozambique, should be available in a georeferenced form, giving a clear spatial dimension on its structure and predicted impact.

5.2 Challenges

5.2.1 Interinstitutional collaboration, capacity building and guidance

Delivering community-based territorial planning will remain a challenge if there are no improvements of institutional collaboration in access, analysis and sharing of information. So far, at district level, there are the cadastral services (SPGC), responsible to register rights, and planning and Infrastructure services (SDPI), responsible to operationalize the territorial planning. Despite the overlapping activities in some cases, these institutions have limited technical and infrastructure capacity, making it difficult to ensure an appropriate data management for decision-making purposes (Cooperativa para Terras Comunitárias, 2015). Since both sectors contribute to a sustainable land governance system, a more interactive and effective collaboration is required to deliver a local level territorial planning, especially now that both are under the same Ministry.

As mentioned earlier, and supported by (Norfolk & De Wit, 2009), land use plans are often written by professionals outside the National institutional framework, through some specific or full adjudication of work. As a result there are variations between District land use plans in both contexts and layout. Specifically and trained territorial planning professionals are required at national, provincial and district level. The elaboration of local land use plans can still be adjudicated to third parties, however a consolidate guidance for elaboration and quality control is required by these professionals from the sector.



District level land planners' professionals are also required to collaborate with community-based organizations, such as the NRMC in monitoring and advocacy activities, to ensure a continuous flow of data, information and capacity. Therefore, this technical capacity needs to be ensured in both district and provincial level.

Basic cadastral and geographic information system infrastructures are required at district level to consolidate local capacity. These infrastructure and technical equipment shall allow the management and provision of updated information on different thematic features at community level.

5.2.2 Development of tools

Territorial planning legislation stated that district level, land use plans shall be elaborated and serve as guide for spatial planning. However, as mentioned above, it is not clearly effective, since it does not capture community-based details that have tremendous influence on land dynamics. Furthermore, as mentioned by (Monteiro, 2016), despite the number of community delimitation deployed, those do not reflect on the district land use plan, as well as individual land rights as noted by Norfolk & De Wit (2009).

In 2006, the former Ministry of Environment launched a manual for physical planning, considering the District as the center for planning economic, social and cultural development (MICOA, 2006). The manual aims to promote territorial planning and natural resources management at community level. It brings basic principles and steps, through illustration techniques on how to build a village, from its location, conception to interactions with villagers. In general it is a manual to guide new community level settlements with a hands-on approach. Access to this practical guide has been deficitary, and there is a need to adjust it to fit to the new standards as a result of products delivered through the delimitation process. There is a need to adjust the manual to serve as an instrument for establishment of new settlements, and deliver a fit-for-purpose practical instrument for general territorial planning at community level.

Alongside those plans, there is a need to deliver simple and practical instruments for territorial planning, that can be easily understood and implemented by the communities. These instruments should deliver operational territorial planning considering:

- Current and future land use (habitation, agriculture, mining, tourism, sewage, etc.);
- Available and potential socio-economic infrastructures;



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- Environment and climate change related challenges
- Investments and resettlement forecasts

The principles of details requested at municipality level instruments such as “Detailed plan” (Plano de pormenor in Portuguese) as mentioned in the territorial planning legislation, could be the base to design and deliver tools to improve territorial planning at community level, especially when pondering that these communities might become villages and consequently cities in the near future.

Development of tools and additional professional planner support associated with land use experts are required to assist and engage in the process of delivering community based territorial planning. Particularly for urban development, in those communities where the conversion from rural to urban is accelerated, the tools should be practical enough to ensure that physical planning follows national and provincial master plans, while delivering local solutions.



6. CONCLUSION

Population growth in Mozambique is a reality. It is also real the transformation of rural areas into urban settlements, particularly those that are located near villages and urban centers, as results of various types of investments delivered at both provincial and district levels. Despite the Government efforts in delivering district level land use plans, these instruments do not seem to capture the reality at community level. There are various activities happening at community level, that could contribute and lead to deliver community level territorial planning. Community land delimitation could play a significant role in supporting the idea of community level territorial planning, by improving and maximizing social preparation (including zoning and cadaster), capacity building of natural resource management committees, and land information management system. Delivering community level territorial planning require a solid inter-institutional collaboration in both provincial and district levels, and it also requires the definition and establishment of effective and sustainable community-based tools that guide the whole process of territorial planning. The tools can be delivered, based on the principle that available tools being used at Municipality level can be improved to fit the reality and challenges of growth at community level.

Under the principle of “Delimitation first” concept, community land delimitation offers a set of participatory approaches, products and tools that can make community level territorial planning a reality. Involvement of national, provincial and district level territorial planners and land experts is crucial for the success of a sustainable community-based planning. Furthermore, future development of these communities are depended on suitable integration of development principles and strategies, always respecting the social, economic and environmental reality of rural communities.



7. RECOMMENDATIONS

6.1 Development of tools – Multi-stakeholder research

This documents highlights the opportunities and challenges to deliver a community-based territorial planning. As mentioned earlier, one of the challenges is to deliver a practical, sustainable and fit-for-purpose tool that allows communities to engage themselves into territorial planning, including monitoring activities. For a better result, is recommended a full research on development activities in selected delimited communities, especially those that face higher pressure due to being located close to expanding cities. The research should integrate multidisciplinary actors, especially those involved in planning and operationalizing territorial plans. Following this recommendation, it is expected the development of specific tools for implementing territorial planning at community level.



REFERENCES

- AICD. (2011). *Mozambique infrastructure: a continental perspective*. Washington.
- Conselho de Ministros. (2007). *Estrategia de Desenvolvimento Rural*. Maputo: Conselho de Ministros - Moçambique.
- Cooperativa para Terras Comunitárias. (2015). *Mapaemanto do sector do cadastro nos distritos e municipios*. CTC-COOP.
- Dalupan, M., Haywood, C., Wardell, D., Cordonnier-Segger, M.-C., & Kibuji, R. (2015). *Building enabling legal frameworks for sustainable land-use investments in Zambia, Tanzania and Mozambique. A sythesis*. CIFOR.
- Dias, C. (2014). *Infrastruturação em áreas rurais: o caso do continente africano*. Lisboa: Universidade Nova de Lisboa.
- Enemark, S., Clifford, K., Lemmen, C., & Maclaren, R. (2014). *Fit-For-Purpose Land Administration*. FIG/World Bank.
- FAO. (1993). *Guideline for land use planning*. Rome: FAO.
- FAO. (2012). *Voluntary Guidelines on the responsible Governance of tenure of land, fisheries and forests in the context of national food security*. FAO/CFS.
- IFAD. (2006). *Community-based natural resource management: how knowledge is managed, disseminated and used*. IFAD.
- IFAD. (2015). *Territorial approaches, rural-urban linkages and inclusive rural transformation*. IFAD.
- INE. (2010). *Anuário estatístico 2010*. Maputo: INE.
- INE. (2015). *Anuário estatístico 2015*. Maputo: INE.
- Iniciativa para Terras Comunitárias. (2013). *Lições aprendidas da iniciativa para terras comunitárias (2006 - 2014): experiências práticas de actividades de delimitação*. ITC.
- Locke, A. (2014). *Mozambique Land Policy Development Case Study*. Case Study.
- Macarringue, L., Matule, E., & Matumbuane, N. (2015). *Integração da dimensão espacial na planificação de uso de terra ao nível distrital – estudo de caso de Boane*. SBSR.
- Matt McIntyre and Associates. (2007). *Review of land information systems for land adminsitration, land-use planning and management*. The Pacif Islands Forum Secretariat.



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- Mei, G., & Alabrase, M. (2013). *Communities' ability in consultations and land transactions: improving the "empowering effect" of tenure security initiatives in rural Mozambique*. World Bank.
- MICOA. (2006). *Manual de técnicas básicas de planeamento físico*. Maputo: Ministério para a Coordenação da Acção Ambiental.
- Ministério de Planificação e Desenvolvimento. (2014). *Estratégia Nacional de Desenvolvimento (2015 - 203)*. Maputo, Mozambique: MPD.
- Monteiro, J. (2015). *Bringing community land delimitation first: a key approach to sustainable land-based investments in Mozambique*. Community Land initiative.
- Monteiro, J. (2016). *Enhancing security of community land rights and management: opportunities and challenges for the Mozambican land administration*. World Bank.
- Monteiro, J., Salomao, A., & Quan, J. (2013). *Improving land administration in Mozambique: a participatory approach to improve monitoring and supervision of land use rights through community land delimitation*. ITC. Chimoio: World Bank.
- MPD. (2014). *Programa integrado de investimentos: infraestruturas prioritárias para 2014 - 2017*. Maputo: Ministério da Planificação e Desenvolvimento.
- Norfolk, S., & De Wit, P. (2009). *Challenges for Territorial Planning in Mozambique*. Maputo: MICOA.
- RICS. (2011). *Crowdsourcing support on land administration. A new, collaborative partnership between citizens and land professionals*. RICS Research.
- Shortle, J., & Bergstrom, J. (2005). *Land Use Problems and Conflicts - Causes, consequences and solutions*. London: Routledge.
- Sitoe, A., Macandza, V., Remane, I., & Mamugy, F. (2015). *Mapeamento de habitats de Moçambique: criando as bases para contrabalanços de biodiversidade em Moçambique*. Maputo: CEAGRN.
- Tanner, C. (2010). Implementing Mozambique law in practice. In W. Anseeuw, & C. Alden, *The struggle over land in Africa: conflicts, politics and changes*. Cape Town: HSRC Press.
- Tanner, C., Lopes, T., & Cristiano, A. (2015). *The legal framework and investment: how to improve Mozambican land legislation*. Maputo: USAID.
- The Oakland Institute. (2011). *Understanding land investments deals in Africa: Mozambique country report*. Oakland: The Oakland Institute.
- The World Bank. (2009). *Mozambique Municipal Development: lessons from first decade*. Maputo: The World Bank.



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- The World Bank. (2010). *Prospects for Growth poles in Mozambique*. Maputo: The World Bank.
- The World Bank. (2012). *Getting to green. A Sourcebook of Pollution Management Policy Tools for Growth and Competitiveness*. The World Bank Group.
- Theting, H., & Brekke, B. (2010). *Land investments or land grab: a critical view from Tanzania and Mozambique*. Oslo: Spire.
- Un-Habitat. (2012). *Handling land: Innovative tools for land governance and secure tenure*. UN-Habitat/IIR/GLTN.
- UN-Habitat. (2015). *International guidelines on urban and territorial planning*. Kenya: UN-Habitat.
- United Nations. (2014). *World Statistics pocketbook 2014 edition*. New York: UN.
- USAID. (2004). *Land and Conflict. A toolkit for intervention*. Office of Conflict Management and Mitigation. USAID.
- USAID. (2008). *Private investment in the Agriculture sector in Mozambique*. USAID.



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Table 1. Territorial planning instruments in Mozambique

Level	Instrument	Description
National	National Territorial Development Plan	Define and establish guidelines for the national territorial planning, including national level priorities
	Special Territorial Plans	Define parameters and conditions of use in spatial, ecological, economic and interprovincial continuity zones
Provincial	Provincial Territorial Development Plans	Define orientations, measures and principles for occupation and use of soil in different areas, following the national guidelines
District	District Land use plans	Establish the spatial organization structure based on identification of areas for preferential use, and define norms for occupation and use of land and natural resources
Municipality	Urban Structure Plan	Establish the total municipality territorial organization norms, considering the actual land occupation, actual and potential social infrastructures
	General urbanization Plan	Qualify the total urban soil, considering the balance between different urban uses and function, and define the network of transport, communication, power and sanitation
	Partial Urbanization Plan	Qualify the partial urban soil, considering the balance between different urban uses and function, and define the network of transport, communication, power and sanitation
	Detail Plan	Define with the detail the typology of occupation of any urban area, regulating the general conditions of construction, the characteristics of infrastructure and services for existing and new areas

Table 2. Summary of available district land use plans in iTC working provinces

Provinces	Districts (total number)	No. of Districts (with Land use Plans)
Cabo Delgado	16	15
Gaza	10	3
Manica	11	9
Nampula	22	14
Niassa	16	8
Sofala	12	11
Zambézia	21	17

Source: Based on information acquired directly from iTC provincial management



LIST OF FIGURES



Figure 1. Example of rural to urban settlement evolution in Manica province

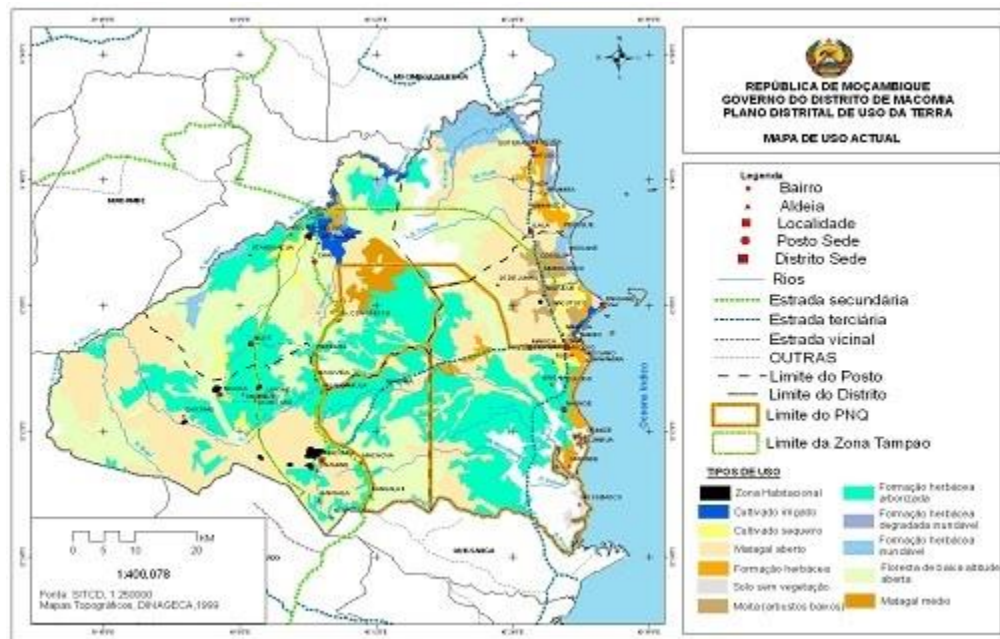


Figure 2. An example of a thematic map (actual land use) used District land use plan
Source: Land use plan of Macomia District – Cabo Delgado



Stages of Community Land Delimitation (iTC)

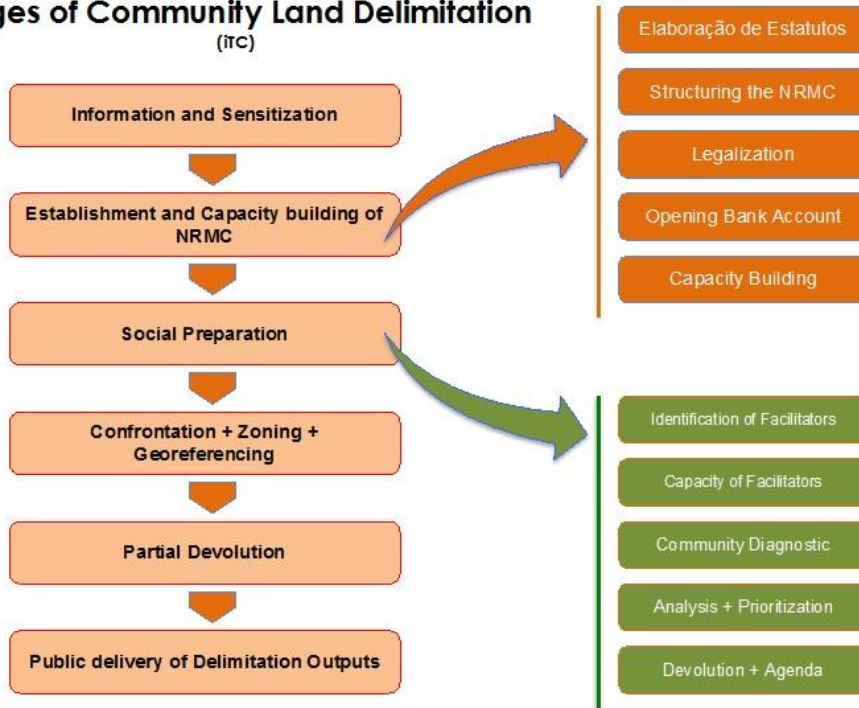


Figure 3. The community land delimitation process in iTC approach

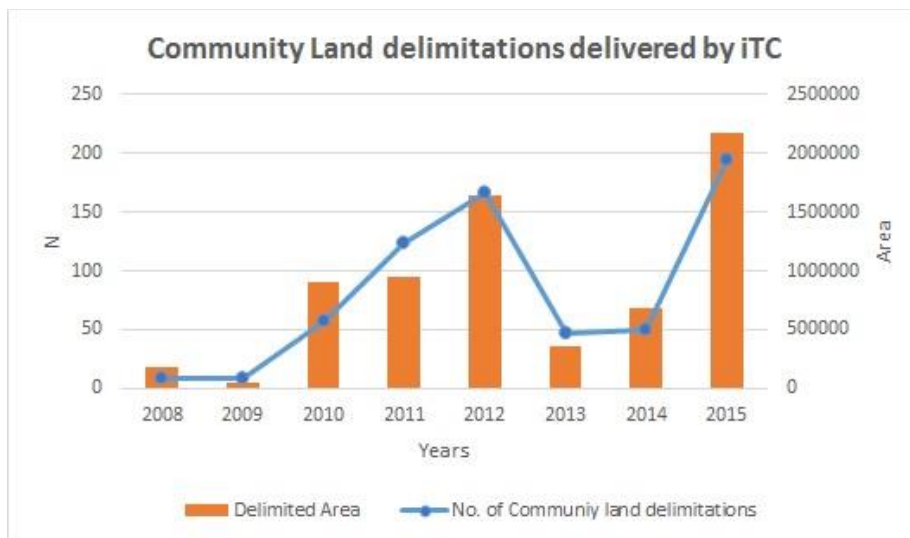


Figure 4. Evolution of community land delimitations (iTC data)