## November 2015



GIS4FI PROCESS NOTE: MOZAMBIQUE

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The i2i data quality team supports Mozambique's Financial Sector Deepening Trust (FSDMoç) in their efforts to make geospatial data accessible to financial inclusion stakeholders, particularly financial service providers. This process note serves to capture key learnings of the journey to date. Process notes will be updated periodically, with the aim of facilitating learning among financial inclusion intermediaries on similar journeys in Africa and beyond.

# Stakeholders, roles and responsibilities

Stakeholder	Contribution
Financial Sector Deepening Trust Mozambique (FSDMoç)	<b>FSDMoç</b> is an in-country facilitator for financial inclusion that has worked closely with other partners, particularly the Central Bank and MIX. They been instrumental in sourcing the data layers used by MIX for their GIS analysis. FSDMoç has a vested interest in ongoing collection of GIS coordinates for their own market monitoring and to provide valuable information to market participants. They are coordinating the geospatial mapping initiative and will assess the interest of Banco de Moçambique (BdM) in this regard.
Banco de Moçambique (BdM)	As the reporting authority and the supervisor of the banks, <b>BdM</b> has access to data critical to geospatial investigation of financial inclusion. BdM also worked with the World Bank on a geospatial mapping project. This potentially provides data for FSDMoç's own programme.
Microfinance Information Exchange (MIX)	<b>MIX</b> is a data hub where microfinance institutions and supporting organizations share institutional data to enhance transparency and market insight. FSDMoç has contracted MIX to develop the Financial Inclusion platform: an interactive, visual representation of supply and demand, illustrating the level of access and usage of financial services in Mozambique. MIX is using its FINclusion Lab tools as the delivery mechanism for this. This interactive tool allows financial service providers, policy makers, regulators and other development professionals to identify problems and devise solutions for increasing financial inclusion in Mozambique. MIX will also provide technical support for the tool and its content.
insight2impact   i2i	<b>i2i</b> is a facility advancing the use of data for financial inclusion. It was established by FinMark Trust and Cenfri in 2015 in response to a growing need amongst policymakers and providers for a platform to inform and support data initiatives in financial inclusion.
	Mozambique is one of the i2i focus countries. The facility aims to learn from and influence the sustainability of initiatives relating to GIS for financial inclusion. It does this by having ongoing conversations with other players (so keeping abreast of developments), reviewing and providing feedback on documents, and providing suggestions where appropriate or requested.



# **2015 FSDMoç geospatial programme developments**

## March 2015: Initialisation

In March 2015, i2i approached FSDMoç about their interest in pursuing a geospatial programme. Prior to this, FSDMoç had already started conversations with MIX about geospatial work in Mozambique. FSDMoç also had successfully obtained approval from its Investment Committee for annual funding for its work with MIX. FSDMoç were aware of an existing BdM-World Bank project on supply-side data, which potentially included geospatial location information.

## April – July 2015: Proposed GIS collection concepts

In April, i2i suggested that FSDMoc consider a fieldwork approach to collecting financial access points so that locations could be geo-captured through GPS devices. The idea is that this would focus on information missing from the BdM-World Bank project.

In May, FSDMoç submitted a proposal for additional funding to its Investment Committee. This didn't come through, which meant that the GPS fieldwork collection would not be possible.

FSDMoç identified the AFI conference, hosted in Maputo in September 2015, as an opportunity to present a basic proof of concept aimed at obtaining buy-in for future GIS work from BdM and private stakeholders in Mozambique. This would use existing funding approved by the IC. To meet the available budget, MIX put forward a proposal to deliver a data map and workbook based on data collection of commercial banks through web-scraping, within the AFI timeframe. In July, this was adapted into an intervention plan and approved by the Investment Committee.

At the end of July, i2i hosted a GIS workshop for FSDs. A representative from FSDMoç and another from BdM attended. At this event they also met with representatives from MIX and agreed to provide key source information to MIX for this intervention plan.

## August – September 2015: GIS proof of concept

MIX used webscraping and data inputs sourced through BdM and FSDMoç to develop dashboards on financial access points. The financial access points only represented banks and formal credit cooperatives, credit and savings organisations, microbank and microcredit operators at a district level. In the dashboard financial access point data was mapped together with FinScope data and maps of electric infrastructure. All of this data had been incorporated into a slide presentation and a live demo, which FSDMoç presented to BdM and commercial banks. The analysis identified 7 key districts with population sizes of over 100 000 that don't have a single access point for any of these formal provider categories.

At the AFI meeting in September, FSDMoç and MIX presented and had a permanent stand demonstrating the dashboard. They also met with a number of providers – 5 banks and one mobile money operator – who found the dashboard district identification positive and wanted to know what to do next.

MIX had identified additional datasets for FSDMoc to obtain in order to further the analysis. MIX also indicated that they were working on the terms and budget for updating the dashboard. They are working with BdM on data-sharing and dashboard updates and consulting directly with two financial services providers on custom dashboards.



# Looking ahead

### Updating the dashboard proof of concept

FSDMoç and MIX will continue sourcing data until they decide that the updated version is appropriate to be published. The hope is that this will be before the end of 2015. This will then be hosted on the FSDMoç website and possibly on BdM's as well.

#### Demonstrating the value of the tool

During the week of November 16<sup>th</sup> 2015, MIX will present a refresher training session with FSDMoç on presenting the dashboard proof of concept and potential use cases to various stakeholders. FSDMoç and MIX will also visit stakeholders such as banks, insurers, mobile money operators as well as BdM to present the proof of concept and potential use cases. From these meetings, FSDMoç should be better placed to ascertain the appetite of stakeholders for geospatial data, as well as the kinds of issues that interest these stakeholders and the data they would need to explore these issues. Depending on arrangements between FSDMoç and MIX, they may also identify two stakeholders for MIX to develop bespoke dashboards.

#### Ownership and housing of GIS data

We envision that a sustainable GIS environment would include access to a central repository of this data for interested users. This introduces the question of where the data would be housed and who would be charged with ownership (updating and cleaning the data and ensuring that it is available to all stakeholders). As a regulatory authority over many of the financial services providers, BdM, will need to endorse the final decision and may want to have this authority. Alternatively, FSDMoç or a third party such as MIX's FinClusion Lab could host it. Ultimately these are questions that we hope will become relevant in the near future as potential users await a cycle of new data.

#### Future collection of financial access point data

If there is demand generated for using GIS data and a call for either more granular data than districtlevel, more recent data or both, then determining how this data will be collected will become relevant. It may be that an external party is contracted to collect the data or that stakeholders such as financial services providers report geospatial data to a central data repository, either voluntarily or through regulation. These are considerations we hope will be contemplated by stakeholders in the near term and that we will be able to come to an efficient and broadly acceptable solution.