

Mapping and Missions Research in Africa: Thinking Out of the Box

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1. Introduction

Our Lord Jesus said to his disciples, "But you will receive power when the Holy Spirit comes on you; and you will be my witnesses in Jerusalem, and in all Judea and Samaria, and to the ends of the earth." (Acts 1:8) We are, therefore, to be witnesses for Jesus Christ, in our local village town or city, in our country, in our region of the world and to all nations. This paper focuses on how missions research and particularly mapping in missions research can be a valuable tool in assisting with the task of reaching out with the Gospel message, especially in the continent of Africa. Current trends and developments in mapping for missions research in Africa are highlighted and some interesting examples of the use of mapping in missions research are presented.

World-wide there is mostly a negative perception of Africa. When you ask people what they think of Africa they often mention poverty, corruption, crime, war, tribal and religious conflicts, AIDS/HIV, Malaria and other diseases, famine, droughts, floods, limited technological advancements, lack of adequate education and dependence on outside aid and resources. Africa is known as the Dark Continent. Africa does have many problems and challenges and certainly is in great need of the Gospel message. However, there is some good coming out of Africa. There is a growing Christian Church and this church is beginning to understand its role to be witnesses for Christ throughout the continent and beyond. There are also some positive trends regarding how maps and research are being used to assist with this task.

2. Maps, Cartography and GIS

A map is a graphic representation, usually on a flat piece of paper of part or all of the world. There is information of one kind or another on the map. A map can be a useful simplified representation of the real world and can show in a visual way what can take many words, graphs or tables of data and information to describe. Mapping or cartography is the art and science of drawing maps. Christian missions and outreach takes place in a geographical setting in some part of our world and so much information which is useful in missions and outreach can be effectively communicated by means of a map such as where the least-reached peoples of the world are, where are the churches in my city etc. Thus in missions and missions research maps are a very valuable tool. Related to the discipline of cartography is the discipline of Geographical Information Systems (GIS) which is the collection, storage and analysis of geographical (spatial) data as well as the presentation of the results of such analysis, often in the form of maps. GIS is usually a computer-based technology. Since missions takes place in geographical space and much spatial (geographic) data and information is useful in planning the task of missions such

as what does the community within a 5 kilometre radius of my church look like, GIS can also be a very useful tool in missions research and strategizing.

3. MANI

The Movement for African National Initiatives (MANI) is an African movement committed to mobilizing the Body of Christ in Africa to fulfill the Great Commission (see <http://www.maniafrica.com>). One way MANI is trying to achieve this is through assisting in the establishments of National Initiatives in each country of Africa that would be a partnership of churches, indigenous mission organizations and individual Christians who would work together to reach their country and beyond with the Gospel message. In doing this MANI is also seeking to help the church in Africa to become less dependent on the rest of the world in advancing the Kingdom of God in the continent and so help change the negative perception of the African Church as unable to do the task without help from places such as Europe, North America and Korea.

MANI is seeking to mobilize the church in Africa for missions. In order to effectively plan for this task accurate up to date information is needed of what the church is already doing, who the people who need to be reached with the Gospel are and where they are to be found. Much of this information can best be displayed in the form of a map. Inserv has been tasked with assisting MANI with research for the Southern African region and an important component of this research involves mapping. Some of the examples of mapping presented below are related to this research.

4. The History of Mapping in Missions Research

Mapping or cartography has a very long history over many centuries. The main focus of this brief overview is not on all of the history of cartography but mostly on the history of the link between cartography and missions research. According to the knowledge of the author, the first use of maps and missions research to mobilize for world missions was by the famous Baptist Missionary to India, William Carey. While Carey was pastoring a church in England from 1786 to 1793, he had to supplement his income by the trade of shoe making. In his shoe maker's shop he had a map on the wall made up of a number of pieces of paper stuck together on which he had drawn a crude map of the world with each of the known countries. As he gathered information about the area, population, religion etc. for each country he would write these in the space for the appropriate country on the map. In 1792 this information together with other research was published in the book titled, *"An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens in which the Religious State of the Different Nations of the World, the Success of Former Undertakings, and the Practicability of Further Undertakings, are considered."* (Carey, 1792; Smith, 1909)

A major contribution to mapping and missions research was made by the missionary explorers who opened up many countries in Africa, Asia and Latin America for the Gospel as they explored places previously unknown in Europe and North America. Perhaps, the most famous of these missionary explorers was the Scot, David Livingstone

(1813 – 1873) who explored many parts of Southern and Central Africa and in so doing both helped improve the maps of these regions and opened up these parts for other missionaries who would follow (Livingstone, 1857; Mackenzie, 1996).

In the 19th and early 20th centuries as printing and cartographic technologies improved and there was a growing focus on Christian missions from Europe and North America a number of Mission Atlases showing the status of Christianity and missions in the world were published (Fahs, 1925)¹.

Since World War II there have been a number of technological developments which have had a major impact in the discipline of cartography and in particular the application of mapping in missions research. These mostly revolve around the developments in the fields of computers and the Internet. As a result of these developments more and more maps can be easily produced with the aid of computers and many who are not expert cartographers are now able to produce maps. Also maps can now be easily communicated around the world by means of e-mail and the World Wide Web. With a little knowledge and training many more people can now produce their own maps without going to a professional cartographer. Many of these maps can be published on the Web and some of these maps are even interactive allowing functions such as zooming in and out and displaying certain features from any computer connected to the Internet. A few examples of websites displaying such maps include <http://www.worldmap.org>, <http://partners.worldmap.org> and <http://www.ywam4k.org>.

The last development in the field of mapping for missions research to be highlighted is the establishment of Global Mapping International (GMI) in 1983. GMI is a mission organization based in Colorado Springs in the USA. The mission of GMI is to produce and present world-class research that fuels emerging mission movements and leaders. Much of this research has a mapping component. GMI is also now involved in the distribution of GIS and Mapping software built on the back of existing commercial software at very reasonable prices to people who will be using the software for Christian ministry purposes. GMI also provides training in the use of such software (see <http://www.gmi.org>). GMI, in partnership, with others is very active in Africa.

5. Developments in Mapping for Missions Research in Africa:

A number of Christian missions research projects have been conducted in Africa in recent years which have a strong mapping component. Some of these projects include:

¹ The following is a list of some of the most significant of these atlases (only those from a Protestant perspective are mentioned):

1867 – 1871: *General Missionary Atlas in 4 volumes* by Rev. Reinhold Grundemann (Germany)

1903: *Geography and Atlas of Protestant Missions* by Rev. Prof. Harlan P. Beach (USA)

1910: *Statistical Atlas of Christian Missions* by Survey and Occupation Commission of the World Missionary Conference (Edinburgh, Scotland) (Edited by Prof Beach, Dr Dennis and Charles H. Fahs) – and expanded American edition was published in 1911.

1925: *World Missionary Atlas* by Beach and Fah with maps by John Bartholomew (USA).

- i. The Bamiléké research project in Cameroon (Bouwa, 2006) to understand the historical, socio-economic, anthropological and spiritual conditions of Bamiléké villages in order to better reach the Bamiléké tribe with the Gospel.
- ii. Church mapping in various African countries and cities by organizations such as DAWN Africa, (<http://www.dawnministries.org>), OC Africa (<http://www.ocafrica.net>) and United Body of Christ (UBOC) (<http://www.uboc.co.za>).
- iii. The Transformation Research Project conducted by the Unit for Religion and Development Research at the University of Stellenbosch. This project was conducted in the great Cape Town Metro as well as some other towns in the Western Cape Province of South Africa and included a strong mapping component that included the mapping of churches and other places of religious worship (Unit for Religion and Development Research, 2004).
- iv. Mapping of HIV/AIDS ministries in the Valley of a Thousand Hills in the KwaZulu-Natal province of South Africa by the Cross Connections Network (<http://www.crossconnections.net>).
- v. The Institute for Strategic Services (Inserv) has also been involved or is currently involved in some missions research projects in the context of MANI that have a mapping component. A number of these projects are used as examples in the following section of this paper.

There is a growing interest in mapping for Christian ministry purposes in Africa and people from a number of different African countries have bought computer mapping and GIS software for ministry purposes through GMI. GMI has conducted computer mapping training in several African countries including Egypt and South Africa. Inserv has also conducted computer mapping training in Lesotho. There is currently interest in mapping training for Christian ministry applications from a number of African countries including Lesotho, South Africa, Namibia, Nigeria, Cameroon, Kenya and Egypt. Most likely this training will be conducted by either GMI or Inserv or Inserv in partnership with GMI.

There is a growing partnership between GMI and Inserv with a view to both mapping projects in Africa and training in the use of computer mapping software for ministry purposes in Africa.

So, it can be seen that in the area of mapping and missions research much good work has already been done in Africa and there are some exciting developments that, God willing, in the future will result in useful, reliable maps and information for the church in Africa which can assist them to more effectively reach out with the Gospel into their continent.

6. Examples of Mappings in Missions' Research with a Focus on Africa:

In line with the command of our Lord Jesus Christ to be his witnesses in all the world but starting in our "Jerusalem" these examples will be grouped under three headings starting

with examples at the local level then moving on the national level and finally looking at the regional, continental and global levels.

(i) Local Level:

- Mapping of the distribution of the percentages of young adults (20 – 34 years old) and those people who claim no religious affiliation was undertaken for the suburbs in the Roodepoort area of the city of Johannesburg in South Africa. The data comes from the last census conducted in South Africa which was in 2001. The two maps are shown in figure 1 below. These maps show that young adults and not children or youth (teenagers) make up the largest percentage of the population in the region. Although a detailed statistical analysis of the data has not been completed it would appear from the maps that the general trend is for suburbs with a higher percentage of young adults also to have a higher percentage of people claiming no religious affiliation. With some local knowledge of the situation in the region one could give some possible explanations for these trends but there is not time to explore these in this paper. These maps should be a motivation for Christian churches in the area not only to focus on ministry to youth and children but also seek ways of reaching young adults in their neighborhood with the Gospel message.

Roodepoort - Young Adults and Non-Religious in 2001

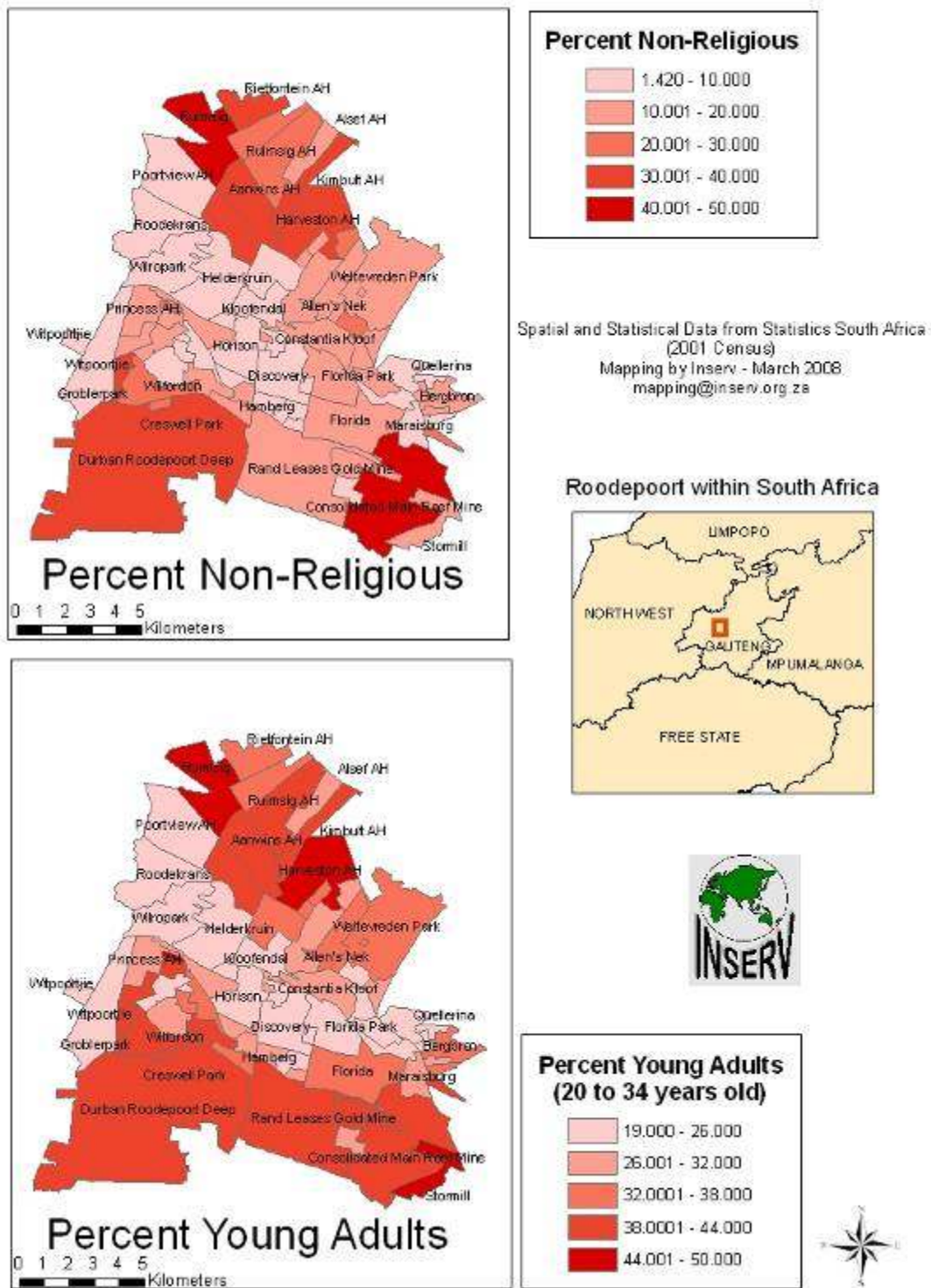


Figure 1: Young Adults and Non-Religious Persons in Roodepoort Area.

(ii) National Level:

- UBOC is involved in mapping and capturing data for all the churches in South Africa. Inserv and UBOC have started discussions with the Sports Ministry Partnership in South Africa (SMPSA) as to ways in which this mapping and information could be used to assist the SMPSA in their planned outreach before, during and after the FIFA World Cup to be held in South Africa during June and July 2010. One suggested way of using the maps would be to identify churches located in close proximity to the 10 stadiums that will be hosting games and mobilizing them to become involved in evangelism and outreach during the World Cup.
- A start has been made on mapping the distribution of the speakers of the 11 official languages of South Africa down to a sub-place level from the 2001 census data. In an urban area a sub-place is equivalent to a suburb and in a rural area a sub-place could be equivalent to a village. Knowledge of language distribution can be very useful when doing church planting or planning various forms of outreach and evangelism. Often there is a need for such information at a more detailed level than just a whole city or province.

(iii) Regional / Continental / Global Level:

- There are plans to extend the mapping of languages in South Africa to include both the mapping of ethnic and social people groups as well as to include all the countries in the Southern African Region (South Africa, Lesotho, Swaziland, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Zambia and Malawi) as accurate and up to date data on the languages and people groups in these countries is gathered from various sources. This mapping project will assist MANI in providing the church in the region with good information that will help them in fulfilling the Great Commission in each of their nations.
- Discussions have begun between Inserv and GMI as well as some others in Africa who are involved in mapping for missions about the possibility of producing an AfricaVue CD that would contain many maps of missions interest for Africa. Such a CD would be a valuable resource for churches, mission agencies and individual missionaries in Africa and could also help to mobilize the church in Africa towards missions. Some of the maps already mentioned in this paper as well as other maps, some which have already been produced and some still to be produced, could be included on such a CD.
- Inserv has produced a map of the 10/40 window for South African Action for World Evangelization (SAAWE). The 10/40 window is the region of the world between 10° N and 40° N in North Africa, the Middle East and Asia that contains the largest portion of the world's population as well as the largest number of ethno-linguistic people groups that are still least reached with the Christian Gospel. SAAWE is sending many mission teams to this region of the world. A

reduced version of the map is shown in figure 2 below. The original map is a wall sized map. The map illustrates a different way of representing the religious composition of each country. Simply to colour each country with a colour to represent the largest religion for each country, which has been done on some other maps, does not present the whole picture. For example in South Korea, 35.02 % of the population are non-religious, 31.67 % are Christian, in the widest definition of the term, and 23.89 % are Buddhist (Johnstone et. al., 2001). Simply to use one colour on the map to indicate the largest religious grouping in South Korea as non-religious does not show the full picture. Similarly in Eritrea 47.97 % of the population is Muslim and 47.43 % are Christian (Johnstone et. al., 2001). Again indicating the major religion of the country as Islam does not give the full picture. Thus a pie chart for each country was placed on the map showing the percentages of each of the main religions in each country, which better depicts the religious composition of each country. The map also gives an indication of the population of each country. Such a map is a very valuable resource to churches and mission organization, such as SAAWE, who are sending missionaries into the 10/40 window. The church in a number of African countries is starting to send missionaries to a number of countries in the 10/40 window.

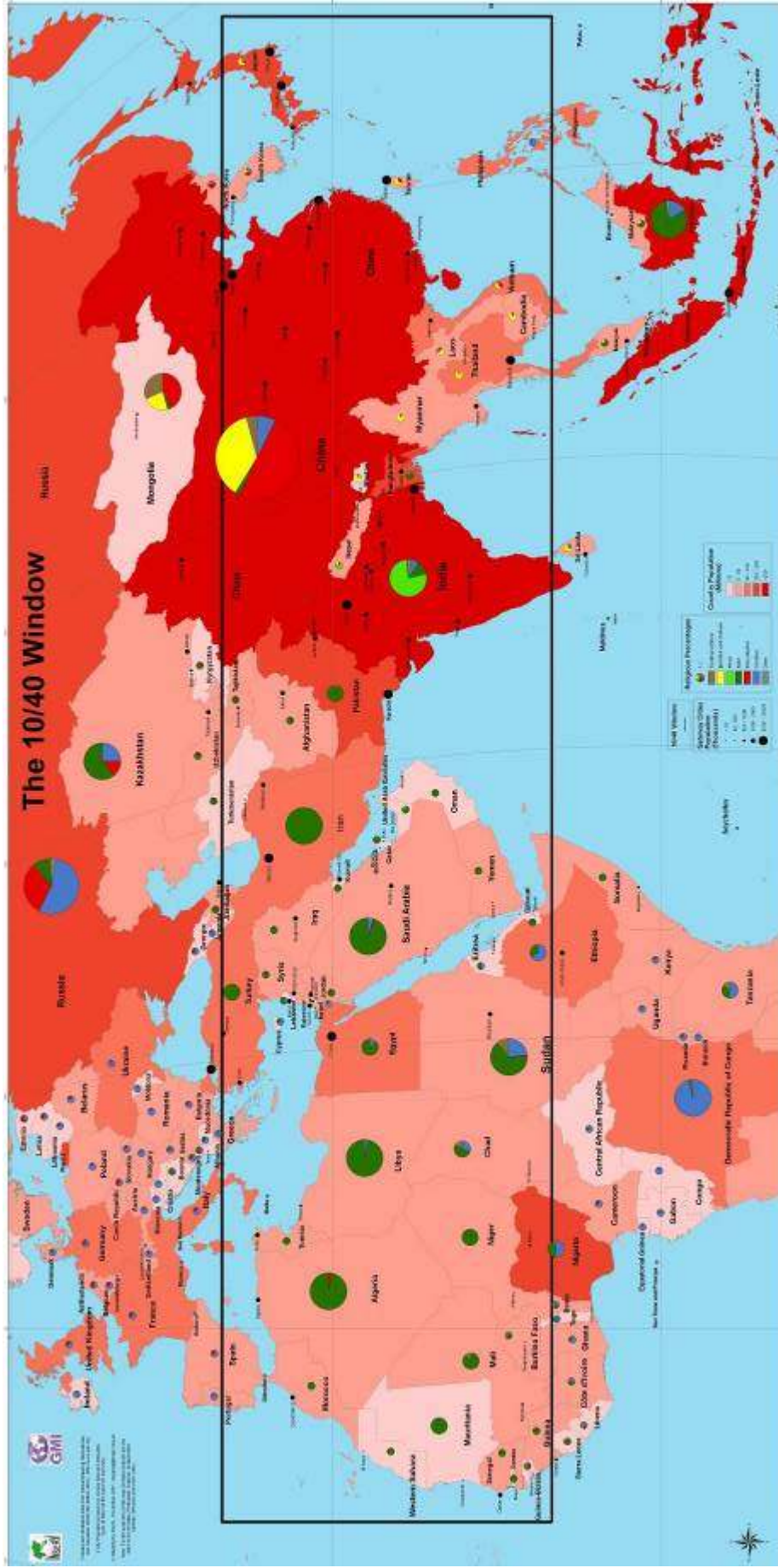


Figure 2: 10/40 Window

7. Future Challenges for Mapping for Missions Research in Africa:

1. The first challenge for mapping for missions research in the African context is to convince indigenous church and mission leaders in Africa of the value of mapping in mission's research and how it can be a useful tool in helping the church to more effectively fulfill the Great Commission in Africa. Recent experience has shown that the best way of meeting this challenge is to show a person a map that clearly shows some information that is of value to them and their ministry.
2. The second challenge for mapping and missions is good quality data and information. A map is only as good as the data and information on which it is based. Incorrect data will result in a map that displays a wrong picture of reality. A map may look very nice but if it displays wrong information it is worthless. There is a need to train good Christian researchers in Africa who can gather and analyze accurate data that will help the church on the continent in the task of missions. Much of this data can be displayed in map form in order to highlight certain trends.
3. The final challenge to be mentioned in this paper is the need for additional resources (personnel, finances, equipment) to complete some of the mapping projects planned for Africa. Although this may be a major obstacle, the church in Africa needs to look at innovative ways of raising the needed resources and not just look to places such as Europe, North America and Korea to supply all the needs in this regard.

8. Conclusions:

Although the continent of Africa has many challenges and problems we can be encouraged that the Gospel, by God's grace, is making progress in the continent and that not everything coming from Africa is negative. We can also be encouraged that in a number of African countries there is a new zeal for evangelism, church planting and missions with the goal of seeing "the earth filled with the knowledge of the glory of the Lord, as the waters cover the sea." (Habakkuk 2:14). Missions research and in particular mapping is playing an increasing role in this growing missions movement in Africa. There are a number of exciting developments in this field and this paper has show a number of different examples of mapping in missions research and how they can help the church in Africa with the task of fulfilling the Great Commission, "Therefore go and make disciples of all nations, baptising them in the name of the Father, and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you." (Matthew 28:19 – 20)

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