

The Future Of Surveying In Ghana

“Igniting the Interest in Land Surveying as a Profession In our kids and young pupils as they choose their career path”

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FIG Working Week 2023

Protecting Our World, Conquering New Frontiers

Orlando, Florida, USA, 28 May - 1 June 2023

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Abstract.

Land Survey is an important action that needs to be done properly before any decision can be taken. It guides informed decisions. There is no way any proper developmental project can be executed without proper surveying of the land. The casualties that are bound to occur if proper land surveying is not done will not only cost individuals and countries financially but can lead to loss of lives. Land surveying simply means knowing the exact location of an object below, on, or above the surface with detailed information about the location such as its physical and cultural properties. This information is then drawn on a sheet of paper called a map for easy understanding and storage. The concept of land surveying makes us understand and know the borders of a piece of land, what infrastructure can be built on a certain piece of land, and the best location to site a particular infrastructure for easy accessibility and efficient usage. Having knowledge concerning a piece of land facilitates effective decision-making. This in the long run prevents the waste of money and makes the infrastructure that has been built sustainable enough to serve many generations to come. But before we can achieve all this, we need to have individuals who understand our built environment and the need to preserve it. Citizens and individuals need to understand the need to survey their lands and children to also be able to understand their environment. We need to have more than enough Land Surveyors so better educate, and collaborate to build a resilient, well-planned, and Sustainable Infrastructure. Hence there is a need to train more land surveyors to increase efficient planning and land use to the benefit of individuals, countries, and the globe as a whole.

This paper looks at a project called “**THE YOUNG IN SURVEYING PROJECT**”. This project aims to develop an interest in being a Land surveyor in kids and young pupils so that as they grow, they choose Land Surveying as their profession.

1. Introduction.

Land surveying is a very important aspect of Infrastructure development. Many factors have to be taken into consideration before any infrastructure can be developed. Some of these factors include the soil component, the topography of a piece of land, the permeability of the soil, and most importantly the borders of a piece of land. This is the field of Land Surveyor. The need for a surveyor is to ensure proper and efficient Spatial Planning and Land use. Many people do not understand the importance of Land surveys. Since infancy, there has not been any practical academic course outline that will make the child understand the Importance of a surveyor in a community. Every child grows up with the interest of becoming either a doctor, nurse, Lawyer, and so on. So, at the end of the day, we are enriched in the field of law, medicine, and so many others but deficient in the field of the land survey because very few children want to be a surveyor. Hence the slums we live in cause the quick spread of infectious diseases, and Buildings collapse here and there causing loss of lives and properties.

In Ghana, planning and efficient land use have been one of the biggest challenges we face. Infrastructure for different purposes is built anyhow and anywhere, not considering the consequences of building that infrastructure on that site or location. This has led to many disasters such as floods, collapsing buildings and so many incidences that could have been avoided if a Land survey was done properly before these infrastructures were built.

Considering this problem, there is a need to train and conscientize pupils to understand and have a burning desire to become Land Surveyors. This will make pupils conscious of their built environment and will make proper investigation about a piece of land before they build on it.

As an initiative to help solve this problem, The Stephen Djaba foundation Launched the **“Young In Surveying Project”**.

2. The Stephen Djaba Foundation (SDF).

Stephen Djaba Foundation is a grassroots Ghanaian community-based non-profit organization dedicated to improving the health, education, human welfare, and opportunities of Ghanaian youth, adults, and families in Ghana. This organization was founded by Mr. Stephen Teye Djaba, who is a Licensed Surveyor and the Vice President of the Licensed Surveyors Association of Ghana (LiSAG).

Our mission is to help provide financial support for the enhancement of mental health care within the

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or community would need to make life better. Regardless of one's Gender, Ethnic or religious background, the Stephen Djaba foundation embraces all unfortunate individuals who genuinely want help to make their lives better. The foundation, with deep respect for cultural values, also seeks to preserve cultural values and expose the rich values of a community to the outside world.

The foundation looks at areas of human lives such as supporting Education in different ways, Supporting Child Care, and providing Ghanaian youth with surviving hand skills such as Beads making, beekeeping, and basket weaving and also holding Youth Education programs that will guide their decision making to make the best out of the worst situation.

With the founder of the organization being a Land Surveyor, Surv. Stephen Djaba seeks to use his position, knowledge, and resources to spearhead the growth of the Surveying Profession. As a result, the Stephen Djaba foundation launched the “**Young In Survey**” project.

3. The Young In Survey Project (YiS).

Young children thrive when they have secure positive relationships with adults who are knowledgeable about how to support their development and learning. The “Young In Surveying (YiS) project under the Stephen Djaba Foundation (SDF) as part of its mission seeks to introduce children to Land survey as well as sustain their interest in the profession. This would in effect secure the future of the Land survey industry.

The Foundation creates opportunities for academic development for students to study Geology through everyday activities at a tender age and aims towards achieving careers and knowledge in Geological Survey and its related disciplines. The project seeks to expose pupils and kids to the concern, ideas, and interest in Land Surveying. This will in the long will help students to be self-employed since a Licensed Surveyor is a self-employed profession. The project also gives children an understanding of their built environment and how to maintain it. The child will then grow up to understand the need for proper house spacing and, proper land survey and also decrease the chances of future land litigation since the boundaries surrounding the land will be determined and stored for future retrieval. This Project also aims to help kids in the Primary, JHS, and SHS levels to better understand the concept of Mapmaking and Surveying. This project combines some major **SDF** interest areas such as Educare, Life Skills, and Youth programs.

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Young in Surveying (YiS) seeks to restore the glory of good surveying towards good nation-building, not just theoretically but practically in terms of Good boundary demarcations, Proper Land Use Planning,

The image below is a press-cutting of the launching of the Young In Survey Project.

Accurate site investigation among others, and prevention of some natural disasters such as floods, Collapsing buildings amongst others.

3.1 Mission

- To educate, excite and inspire the next generation of survey professionals.
- Contribute to the achievement of the Short-term Development Goals (SDGs) of Ghana by improving upon Land Surveying.
- Facilitate community development by Mapping out communities for effective decision-making.

3.2 Mode of Operation

The Young In Surveying Project will operate in primary, junior, and senior secondary schools as well as target the youth, especially in vulnerable communities, as an extracurricular activity.

3.3 Training Programs

- Simplified methods and approaches would be used to introduce these young ones to the survey world. Trainers will take into consideration the children's independent discoveries, the use of alternative strategies for inquiry, and their greater persistence in problem-solving.
- A teaching and training curriculum from ESRI will be adopted to develop a systematic process that will facilitate the project.

The Young In Surveying Project would: -

- Introduce children to the world of Geo Survey through the use of everyday items around them to sustain their interest;
- Provide education on everything Geospatial, including different areas of surveying, equipment, solutions, and jobs;
- Create a resource for the survey community to share with their children to help them understand what their parents do at work;
- Create a professional-student platform where the students would be educated on career paths and

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- Provide educational materials such as posters, coloring sheets, and quizzes to facilitate the learning process among others.

3.3.1 Training Team

The team that would be responsible for training the children would be made up of experts in the various fields of survey, teachers, mentors, and volunteers from the Survey and Mapping school.

Parents who find themselves in survey and its related disciplines can also contribute their quota by showcasing to the young ones what their field of work entails, during group practical sessions.

3.3.2 Employment –Assist Program

- Children under the program would be guided on the choice of courses and programs to study right from their Primary and Junior Secondary School stage through to the Tertiary level. They would be encouraged to develop and undertake survey projects and develop ideas that would be marketable and earn them business.
- Internship opportunities will also be provided to give children an on-the-field experience to sharpen the theoretical knowledge acquired.

3.4 Our Goals

The main goal of the Young in Surveying project is to create a suitable environment that will facilitate the teaching and learning of Land Surveying and also provide the necessary opportunities for kids and pupils to explore the unending and dive deep into the understanding of Land Survey and its related professions.

3.5 Benefits of Young In Surveying Project

3.5.1 To the Child

- The project exposes the Practices involved in Land Surveying allowing him/her to explore Land Surveying as a Profession.
- The Project secondly equips the child with the necessary skills and opportunities that paves way for the child to be a good and efficient surveyor. This includes access to reputable Surveying firms such as Geo-tech Systems Limited in Ghana for internship opportunities, Also giving the youth access to reputable surveyors to impact their knowledge and skills.
- Also, it enables the child to be self-employed hence being able to provide for his family in the future.

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- The project facilitates the child or youth's understanding of other disciplines such as mathematics, Social Studies, and so on.
- It also equips the child with survival and Life skills while improving the child's ability to be creative in problem-solving.

3.5.2 To the Community.

- The project reduces social vices in the community as it provides jobs for the youth so he or she doesn't involve themselves in acts of violence.
- With the understanding of surveying, the community develops an understanding of the importance of good spatial planning to reduce the risk of disaster.
- Also with the town well planned, the community gains government attention as good planning facilitates good decision-making.

3.5.3 To the Country

- The project in the long run promotes the development of Human resources and the country's built environment.
- Secondly, as the Project creates self-employment for the youth, taxes increase which in turn increases the country's revenue.
- The rate and risk of Natural disasters such as floods and the spread of infectious diseases country reduce as towns and cities are well-planned.
- Also, the Young in Survey project aids the country in achieving some important Short-Term Development Goals (SDGs).

4.0 The Young In Surveying Project and The Achievement of the Short-Term Development Goals.



The Young In Survey Project in the long run can help Ghana achieve some major goals in the SDGs which include the following.

4.1 NO POVERTY.



This is the first and the most important goal among all the remaining SDGs. Poverty is the root cause of most SDG-related problems. Without money, one cannot access quality education, and health care and even cannot afford his/her basic survival needs. We must be able to map out the poverty in Ghana. This will help governments and stakeholders properly plan Effective Intervention programs to aid target areas that the map will reveal as extremely poor. It also helps determine the needs of towns and cities so that government and Interventional Agencies can target the specific needs of these communities as a deliberate action to help in the reduction of poverty. The Young In Surveying Project helps train children and youth to participate in data collection and field surveys. This aids to increase the rate and efficiency of data collection giving a wider information collection coverage within a short time.

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4.2 ZERO HUNGER



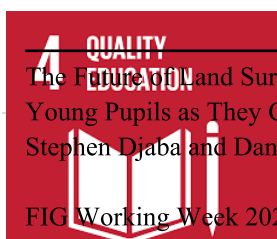
Food security is one of the world's greatest concerns. With the alarming increase in population, there is a need to properly map out farmlands. This will help us properly quantify the food supply in the country and enable us to understand the ratio of food supply to the population. This will enhance good decision-making to improve crop production in Ghana. The Young In Surveying project will teach the youth and young people how to use their phones and handheld GPS to map out their areas and communities. This will enable communities and government to understand the food channels and take the necessary decision to ensure continuous food supply in the country, hence achieving the second SDG-Zero hunger.

4.3 GOOD HEALTH



Access to good health facilities is one very crucial need for human survival. Most people lose their lives because they either cannot access good healthcare in time or they cannot afford it. With the issue of affordability, it is understood that when the first SDG (No Poverty) is achieved people can be able to afford Good health care. But with accessibility, most communities have to travel for miles on a bumpy road before they can access healthcare of any statute. Most people die on arrival while others die on the road. Mapping our community makes us know the exact location to build health centers that will be accessible to many communities. Also, the mapping of our communities will make us understand the health requirement of a community or city taking into consideration the population of the community and the Land Mass of the community. The Young In Survey project gives the youth and pupils in the community the opportunity, Skills, and knowledge to produce maps of their community. These maps will enable give a pictorial understanding of the layout of the community hence knowing the coverage of existing health centers and areas that need health centers.

4.4 QUALITY EDUCATION



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The Young In Surveying Project kills multiple birds with one stone as it

- Enhances the Pupils' understanding of other academic disciplines such as mathematics, social studies, and so on.
- Also, the project enables students to draw a map of their community showing the spatial distribution of educational Institutions. This enables decision-makers to know where to build schools to satisfy the academic needs of children in the community. Gradually increasing the literary rate of the country.
- The Project also guides pupils in the choice of academic programs. This will guide the pupils as they climb the academic ladder.

4.5 CLEAN WATER AND SANITATION



Cleanliness is next to godliness. The survival of every nation depends on the ability of the citizens to work and pay taxes. This increases the nation's financial ability to undertake developmental projects. If most citizens are ill, they wouldn't be able to work. A filthy environment and unclean water breed bacteria and mosquitoes, causing illness and diseases such as cholera, dysentery, and

Malaria. Mapping dump sites, water channels, and drainage systems enable the tracking of water pollution, track diseases and also understand the best vantage points to place waste bins to avoid people dumping refuse everywhere. The Young In Survey project trains little surveyors to help map their communities to know water channels and dumpsites to promote development.

4.6 RENEWABLE ENERGY



As cities expand and the population grows, the demand for electrical energy is on the rise. Hence there is a need to better map out power stations and power grids. This map will help Energy providers understand the energy supply coverage of each

power station and grid. Trace faulty Power stations and know the exact location to

construct a power station or grid pole for new vicinities and communities. The Young In Survey Project trains Surveyors to help map out their power grids for good management of power grids and stations in Ghana.

4.7 GOOD JOB AND ECONOMIC GROWTH

8 DECENT WORK AND ECONOMIC GROWTH



The Young In Surveying Project seeks to secure a future for kinds in Land surveying and its surrounding profession. The project also gives the youth and young pupils exposure and practical knowledge which is a requirement by most employing institutions. The project with the aid of other supporting organizations will allow the little surveyors to have an internship program in reputable surveying firms to give them an on-the-ground experience in the cooperate world. This helps give little surveyors employment and through taxation, economic growth will be achieved.

4.8 SUSTAINABLE CITIES AND COMMUNITIES.

11 SUSTAINABLE CITIES AND COMMUNITIES



The Young In Surveying Project is directly linked to the achievement of this SGD. Since land surveying helps in planning communities and cities, the more land surveyors available means there will be enough Land surveyors to help plan the development of towns, and cities. This will aid in the prevention of slums and congestion in populated towns and cities. Since the project helps train Land surveyors, the project will facilitate the achievement of this Goal by training more Ghanaian Surveyors.

4.9 CLIMATE ACTION, LIFE BELOW WATER, AND LIFE ON LAND.

13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



These three Short-term development goals can be achieved when more Land Surveyors are trained. These three Goals have to be mapped in Ghana as well. Rainfall patterns and Surveying Professionals can make Our Better understand Young Pupils as They Choose Their Career Path” (11903)

rainfall distribution across the nation. The collaborative efforts of the Young In Surveying project across the country will aid in creating a rainfall pattern map for better decision-making. Also, the mapping of all lives on land which includes the human population, forest reserves, and game reserves will pave the way to enhancing a good ecosystem creating a convenient environment for the growth of all lives on land and below the waters.

5.0 PARTNERSHIP WITH LOCAL AND INTERNATIONAL ORGANIZATIONS

The program would partner with survey-related associations both local and international, with like-minded individuals and companies around the world.

6.0 SPONSORSHIP & BRANDING OPPORTUNITIES

There are several benefits and branding opportunities associated with the Young In Surveying Project initiative which include:

- Branding a child to represent a particular profession or company to gain new clients through brand exposure;
- Supporting a child to become an ambassador and thus attain local and international coverage of your brand;
- Help provide free resources that kids will enjoy. Sponsorship money is used to provide materials for them to use as learning materials;
- Provide sponsorship materials, finances, and logistics for practical case studies; and
- Give something back and invest in the future of surveying and the geospatial industry.

The Young In Surveying Project is dedicated to using all resources available through its provision and sponsorships, judiciously to make the training process worthwhile.

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