

# **Land Grabbing in the Oil and Gas Regions of Ghana– Emerging Problems and Challenges**

**Tina Dzigbordi WEMEGAH and Edward Attimo Amihyiah KWESI, Ghana**

**Key Words:** Oil and Gas, Land Acquisition, Rights, Ownership, Compensation, Livelihood

## **ABSTRACT**

One of the emerging problems associated with Ghana's oil and gas development is the acquisition of large tracts of land and its subsequent socio-economic and cultural impacts in the coastal regions of the Jomoro and Elemele Districts which are the immediate host communities of the oil and gas deposits. These regions are experiencing restriction on sea fishing, and their farmlands are being taken over by projects related to the oil and gas development. As a result of this, concerns and agitations are being raised as to alternative sources of livelihood and who is to provide them, adequate compensation, protection of their ancestral rights in the sea and land, protection against likely famine and other perceived problems attributable to the oil and gas development in the region.

This paper discusses these emerging problems and suggests ways of dealing with them effectively. It also discusses and highlights the importance of geo-information technology and the role of surveyors in solving such problems. Data was compiled from direct field visits and observation, interviews and relevant literature on the issues. The paper observes that one of the major impacts of the oil and gas developments in Ghana can be seen in the pollution and destruction of natural sources of livelihood—the sea and coconut plantation—in the host communities of the Jomoro and Elemele coastal lands, and that this has the potential of rendering the indigenes poorer and less capable to manage their own socio-economic needs if sustainable interventions measures are not put in place to cater for this. It therefore recommends that the oil and gas companies, the state and all concerned stakeholders should give proper attention to the emerging problems and apply the suggested solutions to address them before they get out of hand.

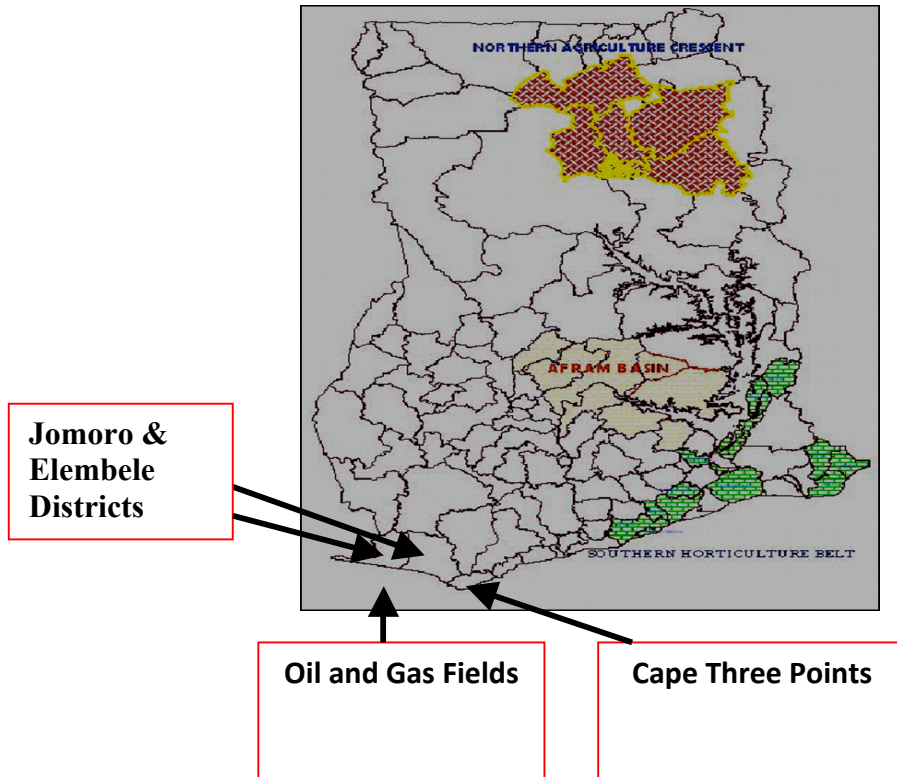
# **Land Grabbing in the Oil and Gas Regions of Ghana– Emerging Problems and Challenges**

**Tina Dzigbordi WEMEGAH and Edward Attimo Amihyiah KWESI, Ghana**

## **1. INTRODUCTION**

Land is an invaluable asset that plays a pivotal role in the sustenance and socio-economic developments of every nation and its people. The coastal lands of the Jomoro and Elemele Districts (Fig. 1) are key areas in Ghana's oil and gas exploitation where land acquisition, compensation, transfer, deprivation and other related problems are emerging over lands being acquired by the oil and gas companies, the state and other private firms in connection with the oil and gas development. These problems have the potential to turn fortunes into woes if not properly handled.

These regions are mostly fishing and farming communities whose indigenes have little or no employable skills to be engaged in the oil and gas development projects being developed in the area. They have long depended on their farm-lands and the sea for survival and as the main economic resources for themselves and their future progeny. With restriction on sea fishing, and their farmlands being taken over, concerns and agitations are being raised as to alternative sources of livelihood and who is to provide them, adequate compensation, protection of their ancestral rights in the sea and land, protection against likely famine and other perceived problems attributable to the oil and gas development in the region. These matters deserve proper attention and handling to avoid recurring socio-economic problems which in turn can retard the development of the oil and gas industry. The sections that follow discuss these issues in more details against the socioeconomic setting of the area as a background, and suggest ways of dealing with them.



**Fig 1 Map of Ghana Showing Study Area Relative to the Oil and Gas Development**

## 2. METHODS EMPLOYED

The method adopted includes reviewing the existing land tenure system and studying the sources of livelihood in the study area, the impacts of oil and gas developments on these and intervention measures that may be necessary to address related emerging problems. The information was gathered through literature, direct visit and observations and interviews and discussions with indigenes and other people in the area.

### 3. RESULTS AND DISCUSSIONS

The results of the study and observations made are discussed in the sessions that follow

#### 3.1 Socio-economic Setting of the Study Area

The economic activities of the area consist mainly of agriculture production and fishing. About 80 % of the population is engaged in farming whilst the remaining find themselves in the area of commerce, tourism, mining and the private informal sector. Tourism, mining and the oil and gas explorations are the new emerging sectors that are attracting many people to the area. These emerging sectors underscore the need to create an enabling environment in the area to maximize the socio-economic contributions these can bring to the district and the nation as a whole (Fig 2).

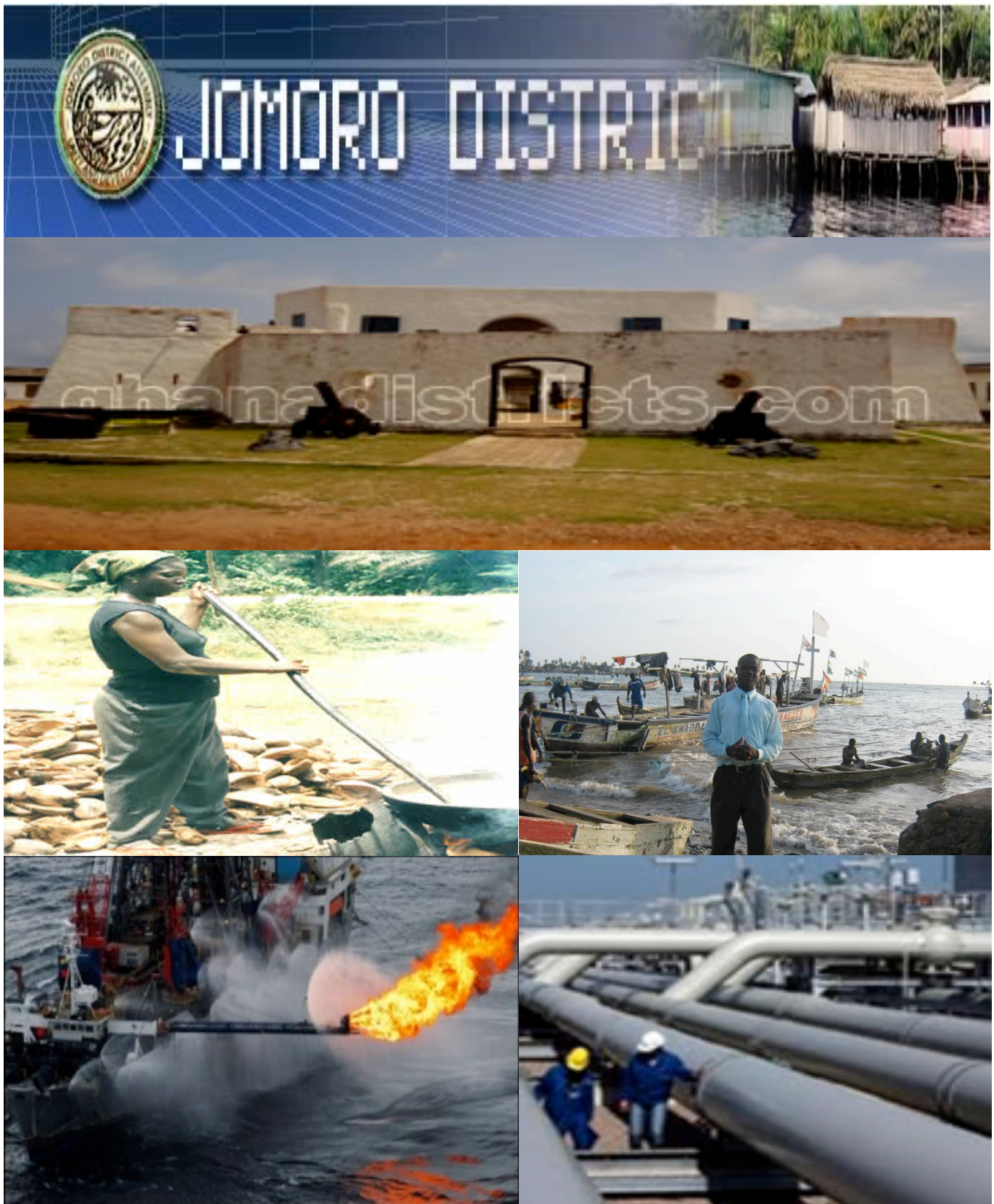
The main cash crops in the area are coconut, rubber, oil palm, cocoa, coffee and teak. Along these, are seasonal crops like maize, cassava, yam, vegetables, plantain, pineapple and groundnuts. The most important and prevalent crop that needs special attention is the coconut plant. (Fig 3).

Coconut plantation serves as the main economic backbone of most families and has been cultivated for decades and passed on to several successive generations over the years. It also serves other multiple purposes for the sustenance and socio-economic activities of the people.

These include being a source of ready food for the people and the animals in the place (a major means of survival during the 1981-82 famine in Ghana), cooking oil, soap, body cream, medicine, roofing materials, sleeping and door mat; a source of energy (fire wood) for domestic and industrial (using the shells) purposes; a source of commercial oil which serve Ghana, Cote d'Ivoire, Nigeria and other countries around; and the by-product from the oil processing serve as feed for poultry, pig and other domestic animals. These trees also serve as wind breaks and barriers against storming winds, erosion, excessive heat, and provide shelter and hiding places for some wild animals. With the exception of the main economic functions, the other benefits from the coconut are available/opened to the general public in the locality (i.e. each one can enter into a plantation for the fallen branches and the husk for fuel and other common domestic needs).

*Mixed and Shift Cropping*:- There are multiple and mixed cropping (including maize, cassava, yam, vegetables, plantain, pineapple and groundnuts) that are done on rotational and shift bases under the coconut plantations (Fig. 3).

*Migrant farmers*:- For the past decade, the area has seen a number of settler farmers who have moved in from other parts of the country, engaging in cocoa, rubber, and other crop farming. Lands acquired for such farms are under the 'abunsa' and 'abunu' methods. There are a number of refugees from neighbouring countries who are also engaged in farming and local commercial activities.



**Fig. 2 An Overview of the Socio-Economic Setting of the Jomoro District**





**Fig. 3 Coconut as the Main Cash Crop with Food Crops in Mixed Farming**

### **3.2 Emerging Problems from Oil and Gas Development**

The immediate negative impacts of the oil and gas developments in the area can be seen in the pollution and destruction of natural sources of livelihood—the sea and coconut plantation—which can

render the indigenes poorer and less capable to manage their own socio-economic needs. Some of the impacts that have significant bearing on this are discuss below.

### 3.2.1 Lost of Lands and Farms

Large areas of farm lands are being acquired and destroyed for oil and gas related projects. The expansion and constructions of roads, power lines, gas lines and buildings and other facilities for the offices, residence and other needs of the oil and gas companies are destroying large tracts of coconut plantations, creating a lot of dust pollutions, and impacting negatively on water resources in the area (Fig. 4).

### 3.2.2 Sea Pollution

There have been occasions of oil spillage with subsequent air, water and chemical pollutions in the area. Large masses of pollutants that look like green algae and semi-solid coal-tar have been found in the seas and the shores that produce bad smell and prevent fishing in the area on regular bases. (see Fig. 2).

### 3.2.3 Restrictions on Fishing at Sea

In view of the oil and gas production, large portions of the sea have been restricted from access by the indigenes for fishing. Exclusive buffer zones around the oil and gas fields have been created. These were expanded from 500 to 1000 units and may be extended further. There are also the dangers and fears of fire accidents from the gas pipe lines and other facilities, and to reduce their impacts, buffer zones have been created around them. All these impacts have direct and indirect negative consequences on the socio-economic prospects of the people (such as the use of their land, farms and fishing business as securities for accessing loans). Fig 4 illustrates some of the impacts.

### 3.2.4 Discovery and Development of New Deposits

The development of new oil fields found in the area, aside those already in operations, will imply restricting the available fishing waters for the people all the more, not only in numbers but also is sizes. The implication of this is that the people in the area may eventually be deprived of their natural source of livelihood and rendered poorer.

### 3.2.5 Unfavourable Land Transfer Deals

Land in the Jomoro and Elembele Districts is generally owned by, families, stools, and the government but are mostly vested in stools under the control of chiefs as custodians. Land holdings within the area include common grazing rights, private residential and agricultural rights, and state ownership.



Land acquisition and transfer of land rights are currently based on both the customary and statutory systems and this is likely to bring future problems. Under the customary system, the land is viewed as a common heritage from God to the indigenes, through their ancestors and must be preserved and handed to their successive descendants. The mode and control of acquisition, use and transfer of land rights is through the customs and traditions of the indigenes. There are generally no recordings of dealings and transfer of rights in the land and surveying and registering of land parcels and transactions are not required (Kwesi *et al* 2011, Kasanga, 1994; Martin, 1992). Plots of land are given out in exchange for one or few bottles of drinks and a token of money (usually in the form of thanks-giving) in the presence of few witnesses. Under the statutory system, land ownership, boundaries and transfer of rights are to be determined, approved, documented and registered by the state through some laid down procedures. (Anon. 2012; Bugri, 2008, Torhonen, 2004).

While the community members are attuned to the customary ways, the more elite ‘land grabbers’ are using the statutory system to protect their interests, and this places the indigenes at a disadvantage and can be a source of potential conflict in the future. While the indigenes or their descanters may still want to enter the land in the future according to their understanding of their customary system, the land grabbers may use their registered rights and have the state to support them in preventing this.

### 3.2.6 Compensation Problems

With the foregoing land acquisition problems and its impacts, one of the serious issues emerging from the area is the compensation for land being grabbed for the oil and gas related projects. The compensation package, methods and mode of payments should be one acceptable to all stakeholders concerned. A number of offers and methods for this have been rejected and new ones are still under discussion for some communities. Among the issues to be addressed are:

- Problems in addressing the multiple ownership rights in the land— settler farmers, individual/family owners, the communal chiefs, the community and the paramount chief. To which group is the compensation going to be paid and how do we ensure equitable share of the proceeds to commensurate with the relative rights in the land, and who manages the community share for communal development?
- How can the compensation package address this issue of providing cash/materials in exchange for losing the present uses of the land, and still sustain the perpetual interest and right of indigenes to the land for socio-economic and cultural sustenance?
- Also in compensating for the crops/plantations at a particular time/period of inspection/counting, how are the multiple and shift cropping system going to be accounted for, especially if there happens to be just one or none at that particular period, even though it is known by the people that the land supports them in those other crops?



- Again, where the cash crop has been destroyed by disease (Fig. 5) and the land owners are waiting for a solution to the problem, how do we compensate for such lands? No compensation? This will hardly be satisfying, though technically speaking, the land do not qualify for tree counting compensation.

Details about this compensation problems and suggested solutions have been discussed in earlier articles and by some other researchers in resent journals, news paper articles and at seminars and conferences. (Ketiboah, 2009; Kwesi *et el*, 2011; Nyamekye, 2012).

### 3.2.7 Land Deprivation (Landlessness)

There are no forests or new lands in the area for families to turn to, apart from what has been acquired and preserved up-to-date for their current and future generations. With uncontrolled grabbing of the available land for oil and gas related development and restriction on the sea, indigenous families and their progeny risk losing their ancestral right in the land and become landless and equal to settlers/foreigners on their own land in the future. There are worries as to how this cherished interest is going to be handled.

### 3.2.8 Potential Food Crises and Poverty in Area

As discussed under section 3.1 and indicated at Fig. 3, the indigenes of the coastal lands of Jomoro and Elembele, do mixed and shift farming for food crops under the coconut plantation mainly because they have no other farm lands available. With the destruction of the plantations, use of the land for oil and gas related projects and restriction on sea fishing, famine is likely to occur in the area and food will have be imported from elsewhere. Furthermore, with little or no employable skills to be engaged in the oil and gas development projects to empower them economically to cope with these possibilities, the indigene are likely to surfer food crises and poverty.



**Fig. 4 Impacts of Oil and Gas Related Developments**



**Fig. 5 Affected Coconut Plantations in the Area**

### 3.3 Dealing with the Challenges/Problems

The weaknesses in land holding and boundary demarcation system in the area, coupled with the low levels of knowledge and understanding of the national land laws and rights, can give land grabbers/developers trooping to the area an undue advantage over the people (initially and use the laws to protect themselves with regards to compensation issues). However, these same weaknesses can serve as potential sources of conflicts and disturbances between the indigenes and land developers in the future, as the indigenes become aware of their rights and fight for a recognition of their perpetual and ancestral ownership to the land, despite any legal commitment they (or their parents) might have entered into with the present land developers and grabbers. (Kasanga and Kotey, 2001; Kasanga, 1994; Toulmin and Quan, 2000).

There is therefore the need for proper education of the indigenes about the legal rules governing land rights and transfer of the rights and the options available to them to preserve their ancestral properties. There is also the need for similar education of land developers and grabbers about the cultural heritage and the customary rules and values of land rights and transfer of such rights from one generation to the next in the area.

Also, a proper documentation of the customary land rights, their owners, boundary demarcations and all other essential aspects of the land tenure system in the area should be done to serve as a baseline for guiding land acquisition and compensation and conflicts resolution in the area. (Arkrofi, 2008; Arko-Adjei, 2005; Dotse, 2003).

Interventions plans for the place should include:

- Provision of, and training in, alternative sources of sustainable livelihood for the indigenes
- Education and training in proper investment of compensation payment for their future benefits and that of their generation to come.
- Devising an effective means to deal with the multiple ownership rights or interest groups in the land— individual/family land owners, the communities, the chiefs and the paramount chief.
- Adopting negotiation approaches instead of imposition in arriving at amicable agreements and commitments.
- Compensation packages should include making indigenous families shareholders in the projects for which significant sizes of the land have been acquired and/or coconut plantation have been destroyed.

### 3.4 The Role of Surveyors

Surveyors play key roles in land transactions. Land ‘buyers’ and owners who want to protect their interest should seek qualified land, valuation and quantity surveyors to assist them in their transactions. By the very nature of their work (i.e. valuation of land properties, demarcating and surveying boundaries and plots, as well as preparing and interpreting the maps and plans that are used for registering ownership and transfer of land rights), they are in better positions to help resolve and avert the potential conflicts from developing into major issues. Any such surveyors that are called upon to do business in the area should help educate both land owners and buyers to appreciate using proper procedures in land transactions to prevent/resolve conflicts. They should help strengthen the customary land secretariats in the districts and assist the community leaders/chiefs to establish secretariats for the proper documentation of land transactions in the area. (Bugri, 2008; Kwesi *et al* 2011).

Most districts, like those in question, have employed planners but do not have land surveyors. Planners therefore after preparing layouts, attempt to set them out leading to errors in boundary demarcation .To avoid this, authorities should ensure that in addition to the planners in the districts, they employ qualified land surveyors to do the demarcations and preparations of cadastral plans the proper registration of land rights.

### 3.5 The Role of Geo-Information Technology

Parts of the above problems can be addressed with good management of geospatial data on the farms or land parcels and the various owners and rights in the area. This need can in turn be handled with the application of modern geospatial information technology tools like GPS, Remote Sensing and Geographic Information System (GIS). The problem of quick retrieval and analyses of data for information on correct identity of land or farm owners, sizes, types and number of crops cultivated, etc., can effectively be addressed with GIS.

A geo-database created on all land and farm polygons helps to know the extent and boundaries of farm lands. Other descriptive data like photographs of the farms, their owners and locations can be incorporated in a GIS to address the problems of multiple ownership, claims and payments (Agul-Irianto, 1998; Kwesi and Asabre, 2010; Nyamekye, 2010; Larsson, 1991). Using aerial photography and satellite images, detail information on the farmlands can be gathered, and integrated with the attribute data in GIS to enable land and farm owners see all features on the land and appreciate it better than the conventional vector maps which show only few features and limited information.



#### 4. CONCLUSIONS AND RECOMMENDATIONS

From the above observations and discussions, the following conclusions and/or recommendations may be drawn:

- There is the need for collaboration between the affected people, traditional leaders/council, government officials, project developers and private partners, including those acting as land acquisition and compensation consultants in finding amicable solutions to the problems. There should be engagement of the individual land owners and the communities, aside the chiefs, in discussing and solving the problems. When they are involved and see their peculiar concerns and needs taken into accounts and the challenges involved in addressing them, they will show more cooperation.
- A management system should be put in place that ensures/guarantees an alternative source of economic livelihood with a perpetual ownership right to it by the indigenes and their future progeny (similar to their ancestral right they have to their land which is now taken over by the developer(s)). This should be viewed as part of the corporate social responsibilities of the companies/organisations and other land developers for the people in the community.
- Surveyors play vital roles in the management of land ownership and transfer of land rights and compensations issues. It is therefore important for surveyors to understand the challenges of land acquisition and compensation in the oil find areas, so that they can act properly to enhance their traditional roles as agents of conflict resolution, when they are called upon for service in those areas.
- The uncontrolled land grabbing situation and its subsequent emerging problems should be tackled now, when the problems are still at low key instead of waiting for the influx of these developers to start and complete their projects, by which time the conflicts may be too chaotic to handle. Intensive education of all parties involved in the problems, the cultural and customary issues involved, the government/public laws involved, the socio-economic challenges involved, and the roles, opportunities and responsibilities of each party/group will be required to address the problems effectively.

#### REFERENCES

- Agul-Irianto, F. (1998). World Conservation Monitoring Centre (WCMC) Handbook on Biodiversity Information Management, Commonwealth Secretariat, London
- Arkrofi, E. O. (2008). “Adjudication Rights and Boundaries for Effective Land Titling”, The Ghana Surveyor, Vol. 1, No.2, pp 17.
- Anon, (2012), [www.ghanadistricts/westernregion/jomorodistrict.htm](http://www.ghanadistricts/westernregion/jomorodistrict.htm), accessed on 2<sup>nd</sup> August 2012
- Arko-Adjei, A. (2005). “Titling Customary Lands, Emerging Challenges Facing the Land Administration Society in the New Millennium”, ITC Enschede Press, the Netherlands, pp.18-22.

- Bugri, J. T. (2008). “Integrating Customary and Statutory Land Tenure Practices in North-east Ghana”, *The Ghana Surveyor*, Vol. 1, No.2, pp 22-30.
- Dotse, J. (2003). “The Map as an Effective Tool in Land Administration — Resolution of Disputes, The Land Surveyor’s Perspective”, *The Ghana Surveyor*, pp 27-32.
- Kasanga, R. and Kotey, N. A. (2001). *Land Management in Ghana: Building on Tradition and Modernity*, IIED, London.
- Kasanga, K. (1994). *Land Tenure Systems and Ecological Degradation in Northern Ghana: What Role for Local Authorities? A Paper Prepared for the Our Common Estate Programme*, RICS, London.
- Ketiboah, K (2009), ‘Environmental Impacts Assessment and Compensations Problems in the Jomoro District’, *daily graphic*, September 8<sup>th</sup> 2009, pp. 5.
- Kwesi, E. A. A. and Asabre, R. K. (2008). “Application of GIS in Solving the Site Selection Problems of Mine Waste Management”, *The Ghana Surveyor*, Vol. 2, No.1, pp 62-63.
- Kwesi, E. A. A., Mantey, S. and Aduah, M. S. (2011). “Land Acquisition and Compensation in the Oil and Gas Regions of Ghana’, Vol. 4, No.1, *The Ghana Surveyor*, Special LS Seminar, pp 102-63.
- Larsson, G. (1991). “Land Registration and Cadastral Systems: Tools for Land Information and Management”, Longman Scientific & Technical, UK.
- Martin, A (1992). “Land Tenure and Environmental Management in Sub-Saharan Africa: Problems and Perspectives”, ECART Position Paper, NRI, Chatham.
- Nyamekye, M. K. (2010). “ Application of GIS on Data Management for Farm Compensation, A Case Study for Goldfields Ghana Limited at the Damang Mines, Tarkwa”, *BSc. Project Research*, (Unpublished), Department of Geomatic Engineering, UMaT, Tarkwa, pp1 and pp12.
- Torhonen, M. P. (2004). *Sustainable Land Tenure and Land Registration in Developing Countries, including a Historical Comparison with an Industrialized Country, Computers, Environment and Urban Systems*, Vol. 28, pp. 545-586
- Toulmin, C. and Quan, J., (2000). “Evolving Land Rights, Policy and Tenure in Africa”. issues: Department for International Development (DFID)/International Institute for Environment and Development (IIED), London

## **BIOGRAPHICAL NOTES**

### **1. Edward Attimo Amihyiah KWESI**

Edward A. A. Kwesi holds a BSc Degree in Geomatic Engineering and an MPhil. Degree in Mining Engineering. He has since 2000, been researching into the Applications of GIS, Remote Sensing, GPS and Cartography in the management of solid waste, land ownership and farm compensation problems in the mining, oil and gas areas of the western region of Ghana. He presently teaches at the Geomatic Engineering Department of the University of Mines and Technology, Ghana, and a professional member of the Ghana Institution of Surveyors (GhIS) and Geoscientists (GhIG) and affiliate of FIG.

### **2. Tina Wemegah**

Tina Dzigbordi Wemegah is a professional Geo-information specialist and a chartered surveyor with over 10 years experience in surveying, photogrammetry and GIS. She holds a BSc Degree in Geomatic Engineering and a Masters Degree in Geoinformation Science and Earth Observation, specializing in Digital Photogrammetry and remote sensing. She has vast experience in land surveying and mapping. She is currently a consultant and a lecturer at Accra Polytechnic, Ghana.

## **CONTACTS**

1.

Title, Given name and family name: **Mr. Edward Attimo Amihyiah KWESI**

Institution: **University of Mines and Technology (UMAT)**

Address: **UMAT, Geomatic Engineering Department, P. O. Box 237, Tarkwa, Ghana.**

City: **Tarkwa**

COUNTRY: **Ghana**

Tel. **+233 243825777**

Fax +

Email: [kwesiedward@hotmail.com](mailto:kwesiedward@hotmail.com); [eaakwesi@umat.edu.gh](mailto:eaakwesi@umat.edu.gh); [kwesiedward@gmail.com](mailto:kwesiedward@gmail.com)

Web site:

2.

Title, Given name and family name: **Ms. Tina Dzigbordi Wemegah**

Institution: **Accra Polytechnic**

Address: **Civil Engineering Department, P.O. Box 561, Accra Ghana.**

City: **Accra**

COUNTRY: **Ghana**

Tel. **+233 244723459**

Fax +

Email: [twemeg@yahoo.co.uk](mailto:twemeg@yahoo.co.uk)

Web site: