

	<p style="text-align: right;">Date : 18/06/2007</p> <p><b>Impact of Globalization on the Information Needs of Farmers in Ghana: A Case Study of Small-Scale Poultry Farmers</b></p> <p><b>Justin Chisenga</b> Regional Office for Africa Food and Agriculture Organization (FAO) Accra Ghana <a href="mailto:Justin.Chisenga@fao.org">Justin.Chisenga@fao.org</a></p> <p>And</p> <p><b>Clement Entsua-Mensah and Joel Sam</b> Institute for Scientific and Technological Information Council for Scientific and Industrial Research Accra Ghana paakwesi71@yahoo.co.uk ; egy28@yahoo.co.uk</p>
<b>Meeting:</b>	<b>120 Agricultural Libraries</b>
<b>Simultaneous Interpretation:</b>	<b>No</b>
<p style="text-align: center;"><b>WORLD LIBRARY AND INFORMATION CONGRESS: 73RD IFLA GENERAL CONFERENCE AND COUNCIL</b>  <b>19-23 August 2007, Durban, South Africa</b>  <a href="http://www.ifla.org/iv/ifla73/index.htm">http://www.ifla.org/iv/ifla73/index.htm</a></p>	

## ***Abstract***

*In Ghana the small-scale poultry farmers are among those that have been severely affected by the globalization process and trade liberalization. To manage their response to the globalization process and trade liberalization, the small-scale poultry farmers in Ghana need to have access to strategic information so that they can keep abreast of the global developments in the poultry industry and conduct their businesses strategically to respond to mitigate the negative impact of the globalization process. This paper presents results of a study involving 25 small-scale poultry farmers and two leading poultry farmers associations - the Ghana National Poultry Farmers Association and the Greater Accra Poultry Farmers Association and the changing information needs.*

## **1. Introduction**

There is no universally acceptable definition of the term "globalization". It means very different things to different people (Bhalla 1998), and the globalization process is historically

complex. Globalization is a long-term process of change, not a static condition (Flanagan, Frost & Kugler 2001), and it is multi-faceted with many important dimensions (Fischer 2001). Simply put, globalization does not only include economic dimension such as trade liberalization, foreign direct investment and the increasing world-wide integration of markets for goods, services, labour, and capital, as it is defined in most cases, but also social, political, environmental, technological, cultural and religious dimensions.

Although the term “globalization” is relatively new and became popular in the late 1980s and early 1990s, the globalization processes has a very long history which is associated with trade and exchange of goods and services. For example, migrants, merchants, and others have always taken their ideas, customs, and products into new lands (Yale GlobalOnline 2007). Further, it is said that a global economy had been in place since the end of the 19th century and continued to develop through the 1930s and was disrupted by the two World Wars and the Cold War (Fischer 2001; Flanagan, Frost & Kugler 2001). However since the 1990s, the globalization process has accelerated. Advances in technology have reduced the costs of trade and increased communication and information flow across the world. Information technology has been a catalyst to the globalization process. It provides the communication network that facilitates the expansion of products, ideas, and resources among nations and among people regardless of geographic location, creating efficient and effective channels to exchange information (Globalization101.org, n.d.). Today, global information communication and flow, facilitated by modern telecommunications technologies such as the Internet, satellites, mobile telephony and other innovations which facilitate instantaneous communication between people and access to knowledge repositories across the globe, is an integral part of the globalization process. For example direct foreign investment associated with globalization does not only involve an expansion of the physical capital stock, but also technical innovation, i.e. knowledge about production methods, management techniques, export markets and economic (IMF 2000).

There are many obvious benefits associated with globalizations, and these include maximum production of goods and services as a result of refined division of labour and the emergence of global markets; lower prices and improvements in quality due to increased goods market competition; improvements in production efficiency which has forced domestic firms to consider competing with their foreign rivals; a worldwide information and knowledge flow which could produce better understanding among people, and also holds the potential for closer scientific collaboration among nations; and easy personal communication and contacts using modern information and communication technologies. However, the globalization process has also raised many questions and concerns due to some of its negative effects, some of which were expressed by delegates at the 59th General Assembly, Third Committee of the United Nations in 2004. The delegates noted that globalization has exacerbated the marginalization of developing countries; disregarded the socio-economic development of poor countries; undermined the capacity of national governments to undertake social policies as public authorities in developing countries appear to be losing some of their policy-making autonomy; aggravated insecurities associated with poverty and vulnerability (United Nations 2004).

Among those hugely concerned with the negative impact of globalization are small-scale farmers and their organizations as well as civil society and policy makers in developing countries. For example, regarding developing countries’ *loss of some of their policy-making autonomy*, it can be observed that in the 1980s and 1990s, most countries as a result of debt default situation, had to agree to implement World Bank and International Monetary Fund

(IMF)'s "structural adjustment policies" which had a negative impact on the rural communities where the bulk of small-scale farmers are based. The policies, according to Khor (2006a) included the following approaches and measures which adversely affected the rural sectors:

- Withdrawal of the state from economic activities;
- Closure or downgrading of state marketing boards;
- Privatization, reduction or removal of subsidies;
- Elimination of import controls such as quantitative restrictions, reduction of import tariffs;
- Re-orientation towards exports; and
- Investment liberalization and deregulation, or the opening up to foreign ownership of assets.

The removal of subsidies and protection from imports made the rural producers more vulnerable to the direct effects and vagaries of the global markets, as the interventionist measures and capacity of the state were withdrawn or withheld, resulting in rural producers facing intense competition from imports that are cheaper than their own produce (Khor 2006a). Considering that in many developing countries, the backbone of national food security is the small-scale farmer (FAO 1995), the impact of globalization and liberalization on this category of farmers should be a major concern to all. Today, small-scale farmers in developing countries are trying to compete on the global markets to survive. For this to work, they need access to strategic information and knowledge to enable them to participate effectively in global trade and to keep abreast of the global agricultural trends. They also need information and knowledge to place them in a stronger position ahead of negotiations with their governments.

## **2. Globalization and Small-Scale Farmers in Ghana**

Agriculture is still the mainstay of Ghana's economy, and about 40% of the GDP is accounted for by agriculture and livestock, forestry, and fishing; about 70% of the employment is dependent on agriculture; the majority of the people engaged in agricultural production are small-scale farmers involved in subsistence agriculture; about 80% of agricultural production is from smallholder family-operated farms, mainly below one hectare (Khor 2006). As it pertains in most developing countries, small-scale farmers in Ghana have not been spared by the globalization process. Results of a study on the impact of globalization and liberalization on small farmers in Ghana by Martin Khor (2006) shows that globalization has a negative impact on small-scale farmers in the country. Among the results of the study, which specifically looked at import liberalization and its effects on the agricultural sector in Ghana, focusing on rice, tomato and poultry are that the government's privatization, deregulation and liberalization programmes of the 1980s and 1990s which were part of policy conditions from the IMF and the World Bank, resulted in:

- An increase in rice imports in spite of the fact that there is significant potential for growth of the local rice sector in Ghana. The situation has remained the same, and in 2006 the total rice imports of 47.2 million kg represented about 19% increase on the 2005 figure of 38.3 million kg, with Thailand followed by the United States of America as the leading source of imported rice (Kwabiah & Essabra-Mensah 2007).

- The collapse of tomato canning factories in the country, and penetration of the heavily subsidized European Union (EU) tomato industry into the Ghanaian economy. This also impacted negatively on the livelihoods of Ghanaian tomato farmers, traders and industry employees, some of whom were displaced from their livelihoods or retrenched.
- Production costs in the poultry industry going up dramatically, and this coupled with the competition the industry faced from cheap imports, many operations closed. Since then, the increasing penetration of imports has rapidly eroded the share of the local poultry industry in the total supply of chicken in the country.

Overall, Khor's study shows that the reduction of applied tariffs by the Government of Ghana on rice, tomato and poultry led to significant increase in heavily subsidized imports of the three products into the country. This adversely affected the competitiveness of the small-scale farmers, and contributed to the unequal market situation wherein the local Ghanaian farmers that received little state support have to compete with farmers and companies in developed countries that are heavily subsidized. This has resulted in the decline in the local industries, and according to the Integrated Social Development Centre (ISODEC), in the 70's to the early 90's, local industry supplied virtually all the chicken and eggs consumed in Ghana. In 1992, 95% of Ghana's poultry requirements were domestically produced and by 2002, the figure had dropped to 11% (ISODEC 2004).

### **3. Information Needs of Small-Scale Poultry Farmers in Ghana**

In agriculture, overall the communication and information flow dimension of the globalization process has accelerated the diffusion and adoption of agricultural knowledge (technologies developed elsewhere) and the ease of access to these technologies in developing countries could play a major role in the alleviation of poverty and hunger. Small-scale farmers in developing countries now have access to agricultural information and technologies which in turn could enhance their production and widen the markets for their products. Further, globalization has also made it possible for small-scale farmers to have instant access to local and international market information using technologies such as the Internet and mobile phones.

#### **3.1 The Approach**

To establish the impact of the globalization process on information needs and flow to small-scale poultry farmers in Ghana, a survey was conducted and information obtained through structured interviews with 28 poultry farmers and the two leading poultry farmers' associations<sup>1</sup> in the country - the Greater Accra Poultry Farmers Association (GAPFA) and the Ghana National Association of Poultry Farmers (GNAPF). Interviews with the farmers were conducted when they visited the GAPFA's feed mill in Accra to purchase poultry feeds and in some cases medicine for their birds from the veterinary drug store at the feed mill.

During the interviews, information on the following was sought from both the poultry farmers and their associations:

- Major issues of concern to the small-scale poultry farmers

---

<sup>1</sup> Interviews were held with the Executive Secretaries of the two associations

- Information needs of small-scale poultry farmers
- Information and communication tools used by the small-scale poultry framers to obtain or communicate information relevant to their poultry farming business.

### 3.1.1 The Ghana National Association of Poultry Farmers

The Ghana National Association of Poultry Farmers (GNAPF) was established in 1995 to plan the development of commercial poultry farming so as to attain self-sufficiency in poultry and poultry products in the country. Its membership is open to all poultry farmers, be it small, medium or large scale, registered with the regional poultry farmers associations such as the Greater Accra Poultry Farmers Association, Ashanti Regional Association of Poultry Farmers, Brong-Ahafo Regional Poultry Farmers Association, Western Regional Association of Poultry Farmers, Eastern Regional Association of Poultry Farmers, Central Regional Association of Poultry Farmers and Volta Regional Association of Poultry Farmers. The total active membership of the association is estimated to be about 1,200 poultry farmers. The GNAPF secretariat:

- liaises with government institutions and disseminates information to its members;
- monitors government policies and lobby on issues that will enhance the growth of the poultry industry in the country;
- prepares from time to time raw material and poultry products' price trends as well as compute cost of feed products based on prevailing prices; and
- organizes periodic seminars, workshops and meetings to enhance its members' know-how.

### 3.1.2 The Greater Accra Poultry Farmers Association

The Greater Accra Poultry Farmers Association (GAPFA) is a company limited by guarantee. It owns a feed mill and produces poultry feeds for sale to its members, provides extension services, conducts capacity building activities in form of seminars and workshops, and runs a veterinary drug store which provides a complete range of medication to members. The Association has about 400 active members.

The Greater Accra region has the largest number of poultry in the country and the official poultry population projection for 2005 stood at 18,044,753 birds even though the figure is unlikely to be accurate due to various factors including the decline in commercial production as result of diseases, competition from imported poultry and poultry products and the high cost of feed ingredients such as maize (Aning 2006).

## **4. Results and Discussions**

### **4.1 Brief Profile of the Poultry Farmers Interviewed**

Aning (2006) categorises the poultry farmers in Ghana into large-scale (above 10,000 birds), medium-scale (5,000 – 10,000) and small-scale (50 – 5,000), and indicates that majority of small-scale (backyard) farmers sell their produce at farmgate. They also sell whole dressed broilers to families and caterers. Results of the discussions with GNPFA also showed that most small-scale poultry farmers already have other sources of livelihoods and are into the poultry business to earn extra income. In addition, most small-scale poultry farmers in the country raise their birds to target the high demand for poultry and poultry products associated

with events and festivals such as Christmas, Easter and Ramadan. These events/festivals provide a readily available market to the small-scale poultry farmers.

Out of the 28 poultry farmers that were interviewed at the GAPFA feed mill shop, 25 (89.3%) had facilities to hold up to 5000 birds (small-scale) and 3 (10.7%) had facilities to hold above 5000 birds (medium-scale). The results of the study discussed below therefore include only the 25 farmers who fall into the small-scale poultry farmers category out of which 8 (32%) had their poultry farms located within the City of Accra and the remaining 17 (68%) had their farms located between 10km and 60km from Accra. The location of the farms within or closer to Accra is mainly due to the fact that the city provides a large market for poultry and poultry products.

Out of the 25 small-scale poultry farmers included in the discussion of the results of the study, three (12%) have been in the poultry farming business for less than 5 years, 14 (56%) for between 5 to 10 years, 6 (24%) for between 10 to 15 years and 2 (8%) for over 15 years. Therefore, it can safely be said that the group of poultry farmers that were interviewed, included farmers that have experienced the impact of globalization and liberalization on the poultry industry in the country.

#### 4.2 Major Issues of Concerns to Poultry Farmers

Asked to indicate in order of priority three major issues of concern to the small-scale poultry farmers in the country, the following (Table 1) were mentioned by more than 75% of the farmers that were interviewed.

Table 1: Major Issues of Concern to Poultry Farmers

<b>Issue of Concern</b>	<b>Frequency of Indication</b>	<b>Percentage</b>
Competition from imported poultry and poultry products	25	100%
High cost for financing poultry business in the country	21	84%
Lack of government incentives to poultry farmers	19	76%

All the farmers interviewed (100%) mentioned competition from imported poultry and poultry products as a major concern. In Ghana, imported chicken is usually in form of processed and convenient ready-to-use parts, is generally cheaper, and often goes for half the price of local equivalents. This has resulted in most people in the urban areas to frequent these products resulting in local small-scale poultry farmers losing a share of the local poultry market. The unrestricted importation from Europe and America of heavily subsidized poultry meat which sell cheaper on the local market has contributed immensely to the depression of broiler bird production in Ghana (Aning 2006).

The loss of the share of the local poultry market is worsened by the high cost of financing of the poultry businesses in the country, which has made it very difficult for most small-scale poultry farmers to expand or diversify their businesses. Twenty-one (84%) of the poultry farmers interviewed mentioned the high cost of financing the business as a second major issue of concern to the farmers in the country. Competitive production in the industry is hindered by the lack of availability of favourable credit to poultry farmers, and the cost of

borrowing is unaffordable for the majority of small-scale poultry farmers and suitable credit facilities are lacking in rural areas (ISODEC 2004).

The lack of government incentives to poultry farmers was the third major issue of concern mentioned by 19 (76%) of the poultry farmers who were interviewed. This is in spite of the fact that the Government of Ghana has for years supported the poultry farmers in many ways. For example in the face of severe maize shortage in Ghana in 2005 Government through the Ministry of Food and Agriculture (MOFA) intervened to import 20,000 metric tones of yellow maize to be sold to poultry farmers (Aning 2006). However, for most small-scale poultry farmers their concern was mainly to do with what is perceived as lack of protection from heavily subsidized foreign imports which are undercutting the local products. For example, according to Aning (2006) in the recent past Government has acted to provide direct support to the poultry industry, which included in 1999 a special tax of 20% which was imposed on poultry meat imports to protect the local industry, which was revised downwards to 10% soon after and totally removed in 2002. This caused a sharp increase in imports and although an attempt was made to legislate to charge a special tax (Act 641 of 2003) this had to be scrapped in 2004 after international protests.

### **4.3 Information Needs by Poultry Farmers**

All the 25 (100%) farmers interviewed indicated that they needed information on the following:

- Local markets, including prices and demand for poultry and poultry products
- Sources of financing and credit for poultry farming business
- Available government incentives that have an impact on poultry farming
- Government policies regarding poultry farming
- Poultry and poultry imports into the country
- Avian influenza

#### **4.3.1 Local markets information**

During the discussions with the Executive Secretary of GNAPF, it emerged that the need for information on local markets could be solely attributed to the impact of globalization and trade liberalization on the poultry industry in the country. On average prices for imported products are about 20% to 30% cheaper than the local products and this has resulted in the small-scale poultry farmers losing a share of the local poultry market to the imported products. Before liberalization, small-scale poultry farmers in the country had a guaranteed market for their poultry and poultry products, and therefore they never actively sought market related information. Nowadays, this is no longer the case. The farmers need information on available local markets, prevailing prices for the local poultry and products as compared to the prices of imported products. The information is being used for various purposes and among them for strategic planning for their businesses.

#### **4.3.2 Source of financing**

The high cost of financing small-scale poultry farming business has resulted in the farmers looking for information on alternative sources of financing, which unfortunately are not readily available.

#### 4.3.3 Government incentives and policies

The Government policies on trade liberalization in the poultry industry have led to the decline of the local industry and closure of some local operations. Therefore small-scale poultry farmers who are still in the business are looking for information indicating a shift in the government policies in favour of the local poultry industry and on the available government incentives to help them continue in the poultry farming business.

#### 4.3.4 Poultry and poultry imports

Information on imported poultry and poultry products is now very vital to the local small-scale poultry farmers. This is due to the stiff competition brought about by the imported products. The farmers want to keep themselves abreast with the developments regarding the importation of poultry and poultry products into the country and the prices at which the imports are being sold. The information is very important for strategic planning for their businesses. This need for information on imported poultry and poultry products, like is the case with the need for market information, is mainly as a result of the globalization process and trade liberalization which have a negative impact on the poultry industry in the country.

#### 4.3.5 Avian influenza

Although not mentioned among the major issues of concern to the poultry farmers, the potential negative impact on the local poultry industry by the Avian Influenza virus has also resulted in the farmers looking for appropriate information on the virus. The outbreaks of Avian Influenza (AI) caused by the Highly Pathogenic H5NI AI strain (HPAI) in Burkina Faso and Nigeria, countries closer to Ghana, is a major concern as it threatens to cause further devastation of the local poultry industry in the country.

### 4.4 Sources of Information

Table 2 below shows that the poultry farmers associations in the country are playing an important role in the provision of information needed by the farmers. In all of the above information needs, more than 70% of the respondent indicated that the association was their main source of information.

Table 2: Farmers' associations as sources of information

<b>Information on:</b>	<b>Frequency of Indication</b>	<b>Percentage</b>
Avian Influenza	24	96%
Local markets, including prices and demand for poultry and poultry products	23	92%
Poultry and poultry imports into the country	23	92%
Available government incentives that have an impact on poultry farming	21	84%
Government policies regarding poultry farming	21	84%
Sources of financing and credit for poultry farming business	19	76%



The poultry farmers associations indicated that they communicate information to their members through personal contacts, newsletters, seminars and meetings.

Table 3 below shows that the second major source of information for most small-scale poultry farmers is the fellow farmer. In fact, regarding information on local markets, including prices and demand for poultry and poultry products, the fellow poultry farmer received the same number of mentioning as the poultry farmers associations, an indication that the farmers are networking a lot among themselves.

Table 3: Fellow poultry farmers as sources of information

<b>Information on:</b>	<b>Frequency of Indication</b>	<b>Percentage</b>
Local markets, including prices and demand for poultry and poultry products	23	92%
Poultry and poultry imports into the country	19	76%
Avian flu	18	72%
Sources of financing and credit for poultry farming business	17	68%
Available government incentives that have an impact on poultry farming	14	56%
Government policies regarding poultry farming	13	52%

The fact the major sources of information for the small-scales poultry farmers in the country are their farmers associations and fellow farmers says a lot about how the farmers have to work together in the face of globalization, trade liberalization and the resulting competition from imported poultry and poultry products. Networking and information sharing among the small-scale poultry farmers and with their associations is vital to the survival of their businesses.

Other notable sources of information that were mentioned by the small-scale poultry farmers are the local FM radio stations and local television channels, which on average received 14 (56%) mentioning each as sources of information on *local markets, sources of finance, government incentives, government policies, poultry and poultry imports*, and the *Avian Influenza virus*. Although the poultry farmers associations indicated that they rarely use radio and television to communicate with their members, some local FM radio stations and television channels do broadcast information relevant to the farmers' information needs. For example, there has been a wide coverage of the Avian Influenza virus outbreaks in the neighbouring countries on the local FM radio stations, television channels and the local newspapers.

Ghana has a vibrant newspaper industry and there are several daily and weekly papers available on the market. It is therefore not surprising that local newspapers, especially the government papers (*The Daily Graphic* and *The Ghanaian Times*), are also used as sources of information by some small-scale poultry farmers. Twelve (48%) indicated that they also obtain information about the *Avian Influenza* from local newspapers; 11 (44%) information about *government policies*; 10 (40%) information about *poultry and poultry products imports* into the country and 9 (36%) information regarding *local markets, source of finance, and government incentives to poultry farmers*.

Regarding the Avian Influenza virus, it should be noted that in most cases the information (news) about the outbreaks in the neighbouring countries carried by the local newspapers (including FM radio stations and television channels), is largely information made available by the major news wires and organizations such as Reuters, Associated Press, Cable News Network (CNN), the British Broadcasting Corporation (BBC), and sometimes the press releases of the Food and Agriculture Organization of the United Nations (FAO). Modern information and communication technologies ensure that the media houses have instant access to the information which is then disseminated to the public. However, it should be noted that some comments made on local FM radio stations regarding the Avian Influenza virus sometimes have not been favourable to the poultry industry in the country. For example, following the outbreak of the Avian Flu virus in Nigeria, the fear of spread to poultry and humans in Ghana was heightened and this was fanned by uncomplimentary radio comments, and the consumer demand for poultry meat and eggs fell drastically (Aning 2006).

#### **4.5 Communication Tools used by the Farmers and the Associations**

Ghana has four mobile phone service providers - Areeba, Mobitel, Kasapa and OneTouch - providing telephone coverage to almost the entire country. It is therefore not surprising that 18 (72%) of the poultry farmers interviewed indicated that they use mobile phones to communicate with fellow farmers and their associations. The same number, 18 (72%) also indicated that they use personal contacts to obtain information, while nine (36%) indicated that they also use the Internet (email) for communication.

The farmers association indicated that they mainly get in touch with their members through personal contacts, seminars and workshops and through the use of print-based newsletters. In the case of GAPFA, contacts with the members are also made when they visit the associations' feed mill and veterinary drug store. The associations do not have websites through which they could also communicate information to their members.

Notably, Ghana has relatively wide spread Internet access especially in major towns where most of the poultry farmers are either located or have their farms close by. In addition, the four mobile phone service providers in the country also provide Internet access facilities on their networks through General Packet Radio Service (GPRS), a Mobile Data Service available to mobile phone users. Further, in January 2007, BusyLabs, an information technology firm, based in Accra at BusyInternet launched Tradenet<sup>2</sup>, a web-based platform linking traders and buyers in major markets in West African sub-region. Tradenet allows buyers and sellers of agricultural inputs and commodities to upload their offers and contact information, which are then sent to subscribers online and through SMS text messages. Tradenet also aggregates price information collected by government and private market enumerators across the region, in partnership with the regional Market Information Systems and Traders' Organizations project (MISTOWA), a network of regional market information systems and traders' organizations funded by USAID's West Africa Mission (USAID/WA). Commodities traded on Tradenet include livestock, specifically cattle, *chicken*, goat, sheep and pig. Unfortunately, the small-scale poultry farmers and their associations in the country have not yet taken advantage of the facilities provided by Tradenet and the GPRS services by the mobile phone service providers, which have the potential of opening up the sub-regional markets to their poultry and poultry products.

---

<sup>2</sup> [www.tradenet.biz](http://www.tradenet.biz)

## 5. Conclusion

The study showed that the globalization process and liberalization have also had an impact on the information needs and flow of information to small-scale poultry farmers in Ghana. In the past, and especially before trade liberalization, small-scale poultry farmers in the country had access to readily available markets for their products. In the face of the competition from imported poultry and poultry products, farmers are now actively seeking *information on local available markets, prices for local poultry and poultry products, and information on imported products*, mainly to be used in the strategic approach to the conduct of their business. It is clear that in the face of globalization, the small-scale poultry farmers and their associations in the country have realized that they need information to enable them to keep abreast with the poultry market situation in the country, for both local and imported products, in order to remain competitive. They are networking and sharing vital information among themselves regarding activities and trends in the local poultry industry and imported poultry and poultry products. Local FM radio stations, television channels and newspapers, which have access to global information distributed by major news wires and organisations, are also acting as a source of information vital to the operations of the small-scale poultry farmers.

Although a good number of small-scale poultry farmers are using mobile phones to communicate and receive information, presently, there is no innovative use of modern information and communication technology tools such as the Internet for the communication of information or for accessing market related information. This is in spite of the wide spread of these technologies in the country and the availability of the Tradenet platform which could provide the small-scale poultry farmers in Ghana with an opportunity to expand their businesses into the sub-regional markets.

## 6. References

- Aning**, K. G. 2006. The structure and importance of commercial and village based poultry in Ghana: final review report. Available online: [http://www.fao.org/docs/eims/upload/213723/agal\\_poultryreview\\_ghana\\_aug06.pdf](http://www.fao.org/docs/eims/upload/213723/agal_poultryreview_ghana_aug06.pdf). (Accessed 9 April 2007).
- Bhalla**, A. S. 1998. "Introduction," In: A.S. Bhalla (editor). *Globalization, growth and marginalization*. Ottawa: IDRC, pp. 1-12.
- Kwabiah**, E. & Essabra-Mensah, E. 2007. *Imported rice continues to dominate market*. Business & Financial Times, Issue No. 787, p.2
- FAO**. 1995. Modules on gender, population & rural development with a focus on land tenure & farming system. Available Online: <http://www.fao.org/docrep/x0252e/x0252e00.HTM>. (Accessed 3 March 2007).
- Fischer**, S. 2001. The Challenge of globalization in Africa. Available online: <http://www.imf.org/external/np/speeches/2001/011901.htm> (Accessed 30 January 2007).
- Flanagan**, S. J.; Frost, E. L. & Kugler, R. L. 2001. Challenges of the global century: report of the project on globalization and national security. Available WWW:

[http://www.ndu.edu/inss/books/Books\\_2001/Challenges%20of%20the%20Global%20Century%20June%202001/GloCenCont.html](http://www.ndu.edu/inss/books/Books_2001/Challenges%20of%20the%20Global%20Century%20June%202001/GloCenCont.html) (Accessed 25 February 2007).

**Globalization101.org**. [n.d.]. Technology & globalization. Available online: <http://www.globalization101.org/uploads/File/Technology/tech2.pdf>. (Accessed 1 March 2007).

**IMF**. 2000. *Globalization: threat or opportunity?* Available online: <http://www.imf.org/external/np/exr/ib/2000/041200.htm>. (Accessed 26 February 2007).

**ISODEC**. 2004. The study of the economic partnership agreements: poultry and tomatoes as a case study. Available online: <http://www.isodec.org.gh/Papers/EPARReport-Final.pdf>. (Accessed 9 April 2007).

**Khor, M.** 2006. The Impact of globalization and liberalization on agriculture and small farmers in developing countries: the experience of Ghana. Available Online: [http://www.twinside.org.sg/title2/par/Ghana\\_study\\_for\\_IFAD\\_project\\_FULL\\_PAPER\\_rev1a\\_pr06.doc](http://www.twinside.org.sg/title2/par/Ghana_study_for_IFAD_project_FULL_PAPER_rev1a_pr06.doc) (Accessed 2 March 2007).

**Khor, M.** 2006a. Globalisation, liberalisation, and protectionism: the global framework affecting rural producers in developing countries. Available Online: [http://www.twinside.org.sg/title2/par/MK\\_global\\_agric\\_paper\\_for\\_ifad\\_23march\\_2006.doc](http://www.twinside.org.sg/title2/par/MK_global_agric_paper_for_ifad_23march_2006.doc) (Accessed 2 March 2007).

**United Nations**. 2004. Delegates express concern over negative impact of globalization, as Third Committee continues debate on social issues. [Press Release GA/SHC/3778]. Available Online: <http://www.un.org/News/Press/docs/2004/gashc3778.doc.htm>. (Accessed 2 March 2007).

**Yale GlobalOnline Magazine**. 2007. The History of globalization. Available online: <http://yaleglobal.yale.edu/about/history.jsp> (Accessed 2 March 2007).