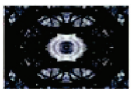
International Journal of Afro-Asian Studies

Volume 2, Number 2: Autumn 2011

Content

ISSN: 0974-3527
ISBN: 978-1-61233-561-2



Brown Walker Press
23331 Water Circle, Boca Raton, FL 33486-8540, USA
www.brownwalker.com/ASMT-journals.php
Published by Director, Asian School of Management and Technology, India

IMPACT OF GLOBAL ECONOMIC CRISIS ON AFRICAN COUNTRIES: POLICY RESPONSES AND OPTIONS

Falendra Kumar Sudan
Associate Professor, Department of Economics, University of Jammu, Jammu, Jammu and Kashmir, India
E-mail: fk_sud@rediffmail.com

Abstract: African countries have not been isolated from the impact of the downturn in global growth. The mechanisms through which the crisis is affecting Africa include a contraction in global trade and a related collapse in primary commodity exports, on which many countries are dependent. Foreign investment and migrant worker remittances are also expected to decrease significantly, and some analysts predict cuts in foreign aid in the medium term if the crisis persists. Africa's most powerful economies have proven particularly vulnerable to the downturn. Risks are rising and it is uncertain how long the crisis will last. African economies did not contribute to the cause of the economic decline but, as casualties of the crisis, African countries can do very little in a direct sense to solve the problem. The latter will depend on efforts in the major industrialized countries to restore the financial system and increase aggregate demand. Should this fail, the economic regression will deepen and be prolonged. Policy makers must walk a tightrope between not aggravating the shock in aggregate demand on the one hand, while protecting hard-won gains in economic fundamentals on the other. Any policy response must also take into account the impact on the poor and seek to incorporate social safety nets.

INTRODUCTION

Global financial crisis was triggered by the bursting of the United States housing bubble in 2007. The reverberations of this are now being felt throughout the world. It is causing a considerable slowdown in most developed countries. The world trade volumes plummeted and industrial production fell drastically. Global economy is teetering on the brink of recession. World growth in 2009 is expected to decline to its lowest rate in 60 years. In the developing world, the knock-on effects from the financial instability and uncertainty in industrialised nations are starting to take hold. The crisis was greatly exacerbated by the behaviour of banks. It has inevitably made the position of any country that has borrowed money worse off. The Sub-Saharan Africa (henceforth, "Africa") was largely insulated from the initial stages of the financial crisis. Majority of the countries in the region are de-linked from the international financial markets. Between 2002 and 2007, Africa's output grew annually by some 6.5 percent. With the worsening of the global financial and economic crisis, the region as a whole has now been exposed to the downturn. Growth estimates have been continually lowered from 5 percent in 2008 to 1 percent in October 2009 (IMF, 2009a). Many African economies depend on the export of primary commodities. In 2005, no less than 14 of 52 African economies depended on one export commodity for more than 75 per cent of total exports. In 22 economies, two to five commodities were responsible for more than 75 per cent of exports. Crude oil is the dominant export commodity in seven countries (AfDB, 2007). Export goods tend to be concentrated in labour intensive goods. The African Growth and Opportunity Act (AGOA) provides for preferential access to the US market. Sharp fall in commodity prices has accompanied the slowdown. It is particularly concern for African economies. Many of them are heavily dependent on commodity exports as their primary source of export revenue. By the end of 2009, developing countries may have lost incomes of at least $750 billion – more than $50 billion in Africa.

Most African countries are "highly exposed and vulnerable to the effects of the crisis" (Africa Progress Panel, 2009). Human consequences include rising unemployment, poverty and hunger. An additional 50 million people trapped in absolute poverty. The number is expected to rise to

90 million by December 2010 (DFID, 2009). The crisis is expected to dampen prospects for reducing African poverty. At least 7% annual growth is generally considered necessary for outpacing population growth and alleviating the toll of hunger, unemployment, and disease (AfDB, 2009). Additional revenue streams such as tourism and remittances are also expected to fall. Foreign aid is predicted to decrease, if the crisis persists. Anticipated negative growth in some countries, including South Africa, may have further ripple effects. Unemployment is expected to rise. This has potential implications for political stability as well. With above backdrop, an attempt has been made to answer the following questions: What are the major channels through which the global financial and economic crisis could spread to African countries? How are the effects being felt in African countries? Which African countries will be able to withstand the crisis created by the downturn in developed economies? Which are most at risk? What are the impacts of the crisis on human development and poverty? What are the policy responses at individual country level, regional level and international level? and What are the ways out of the crisis and to mitigate its impact in African countries?

MAJOR CHANNELS OF TRANSMISSION OF THE FINANCIAL CRISIS

Many African countries are dependent on foreign finance inflows. They are even more dependent on commodity based export growth (Naude, 2009). This exposed them to shocks. Africa is the least integrated region. Even then, it could actually be the worst hit. Africa is already most conflict ridden continent in the world. An exacerbation of resource scarcity could increase conflict across the continent. Emerging markets (South Africa, Nigeria, Ghana and Kenya) were hit first through their stock exchanges and financial links with other regions in the world. The crisis has now affected the region's lower income countries (LICs). This is through indirect channels of trade and remittances. Africa is also reeling from the food and fuel price shocks of 2007-08. The current account of oil and food importers was in balance by 2003. It was in deficit by 4% in 2007. Inflation has also doubled. Many African countries are, therefore, in a bad position to face yet another crisis. Terms of trade shock tend to be highest in oil exporting countries. Kenya, Malawi and Tanzania are projected to have faced terms of trade shocks of greater than 5% of GDP. Many countries in Africa are already making unsatisfactory progress in their efforts to achieve the Millennium Development Goals (MDGs). This "triple jeopardy" has thrown millions of households into poverty. This will further hinder progress (World Bank, 2009). te Velde et al (2009a) and Massa and Velde (2008) found that the main channels through which Africa is being affected are: declining private financial flows (portfolio investment flows; foreign direct investment and bond issuances); declining values of trade; decline in workers" remittances and decline in overseas development assistance (ODA).

i. Economic growth

In Africa, GDP growth rates ranged from 5.9 percent to 8.1 percent during 1997-2007. It has been estimated that an annual average growth rate of 7 per cent should be maintained in order for the continent to achieve at least MDG number one, which is to halve the number of people living on less than $1 per day. As a result of the financial and economic crises, economic growth has faltered in many economies in the region. Output is expected to expand by just 1 percent in 2009. The prudent macroeconomic policies in recent years have given many countries some policy space to counter the effects of the slowdown. With recovery in global economic growth, growth in Africa should pick up to some 4 percent in 2010. However, there are significant downside risks (IMF, 2009a). In average oil exporter country in Africa, GDP growth is expected to decline by 6.5 percentage points in 2009 compared to pre-crisis period (2004-08). The deterioration in

the current account and fiscal deficits is expected to be in double digits. In many countries, the decline in output growth has been due directly to lower oil production (not all related to the global recession). The deterioration in current account and fiscal balances has resulted from declining output and lower prices. Middle income countries (MICs) of Africa are the next most affected as their output. Growth is expected to decline by 7 percentage points in 2009 relative to the 2004–08 average. The impact on fiscal balances will be less than among oil exporting countries. The consequences of such a reduction in growth in Africa are likely to be higher unemployment and poverty; increases in infant mortality; and adverse coping with long-lasting effects such as higher school drop-out rates, reductions in health care, environmental degradation and a rise in conflict (Kwasi and Naude, 2009). The low income countries (LICs) and fragile states of Africa are least affected. They are less integrated into the global economy. In some cases impetus for growth and higher inflation are coming from post-conflict reconstruction (Côte d'Ivoire, Burundi, Liberia) (IMF, 2009a).

The lower growth in the African region is a major setback. Africa region has had an average impressive growth rate of real economic output of above 5 per cent since 2000. There is variation in the extent to which the different African countries will be affected by the crisis. This is due to the differences in the economies of the countries (AfDB, OECD and ECA, 2009). The decline in economic growth in 2009 is expected to be more severe in Angola, Botswana, South Africa, Equatorial Guinea and the Sudan. They are expected to lose more than 4 percentage points in growth. In Egypt, Kenya, Cape Verde, Nigeria, Ethiopia, Tunisia, Namibia, Mozambique, Sierra Leone, Lesotho, Ghana and the Democratic Republic of the Congo, growth is expected to decline by between 2 and 3 percentage points in 2009 (ECA, 2009). Countries that have limited economic diversification and are heavily dependent on external finance for their development could be hit hardest by the crisis.

ii. Export revenues

African countries are most susceptible to global slowdown affecting their exports. This is mainly due to a low export base, concentrated in a few commodities and great reliance on export revenue for debt servicing and government expenditure. Exports amount to approximately a third of Africa GDP. Africa accounts for less than 2% of global trade. Many African economies depend on trade in commodity exports. Due to the global crisis, prices on the world market have declined drastically. Price slump in oil and many mineral commodities, combined with decreased external demand, dealt a severe blow to the region. The oil and other mineral fuels represented 68% of African exports to the world by value in 2008; ores, slag and ash about 14%; and precious stones about 4%. African countries are thus exporting less on average, and at lower prices, than a year ago. Investor perceptions of risk have exacerbated the impact of falling commodity prices for resource-rich African countries that are also fragile or post-conflict states.

Exports in U.S.$ terms are set to decline by 40 percent. It has resulted in a sharp swing in the external current account from an average surplus of 11.75 percent of GDP for 2004-08 to 1.5 percent in 2009. Inflation is expected to remain in the double digits through 2009 - pushed up largely by Nigeria and Angola. Government spending by oil exporters set to increase in real terms in 2009. Overall fiscal balance is expected to swing from a surplus of 6.5 percent of GDP in 2004–08 to a deficit of over 6 percent in 2009. Dramatic widening of the fiscal deficit is expected to fall by a third relative to 2008. Spending growth is on average expected to remain quite high in 2009. Slump in growth of Africa's oil exporters is likely to be more modest. Economic activity is projected to slow from growth of 6.75 percent in 2004–08 to a contraction of 25 per-

cent in 2009. This is partly explained by the lower share of oil production in GDP in Africa's exporters (IMF, 2009a).

Several other countries depend in part on international tourist arrivals. This declined worldwide by about 8 percent in the first four months of 2009 compared to 2008 (U.N. World Tourism Organization, 2009). African countries' export exposure to advanced economies has increased in recent years. On average, a 1-percentage-point decline in world growth is associated with a roughly 0.5-percentage-point drop in GDP growth in Africa (Drummond and Ramirez, 2009). Global trade could drop even further if countries react to the economic crisis by enacting additional trade barriers. African economies face the further risk. Global recession will spark new attempts by developed countries to restrict imports and protect local producers.

The use of protectionist measures is on the rise (Siddiqi, 2009). Policies aimed at encouraging trade with Africa could be threatened by political pressures (Moss, 2009). Tightening of international credit markets is also expected to render it more difficult for African countries to access trade finance (Dorsey, 2009). In prior financial crises, a drop in the availability of trade finance negatively impacted the operations of private firms. It is unclear whether the current crisis will have a similar impact (Humphrey, 2009).

Trade picture for Africa is not without its bright spots. Some countries are experiencing export growth due to recent significant investments in infrastructure and resource development. Burkina Faso's export performance is expected to expand rapidly in 2009-2010. This is due to a recovery in cotton sector, combined with a surge in gold exports as four new mines begin full production. Djibouti, a major cargo transportation hub, is also expected to see rapid growth in export volumes. In Liberia, revitalization of mineral, timber, rubber, and palm oil production is forecasted to drive export growth. Export growth in Malawi is expected to be boosted by the expansion of a uranium mine in Kayelekera.

There are lower export revenues. Most affected commodities include crude oil; minerals such as copper; and agricultural products such as coffee, cotton and sugar. In Burundi, coffee earnings fell by 36 per cent between October and November 2008. In Angola, Cape Verde, Côte d'Ivoire, agricultural export earnings are expected to decline in 2009 when compared to 2008 (ECA, 2009). In some countries, export receipts from agricultural products are rising. In Ethiopia, coffee exports in March 2009 were half the target (USD 221 million compared to a target of USD 446.7 million) (AfDB, 2009). Due to the decline in global demand, copper production in the Democratic Republic of Congo (DRC) declined. A similar trend is observed for cobalt and diamonds. About 40 companies in the DRC extractive sector closed at the end of 2008 and over 300,000 jobs were lost (AfDB, 2009).

iii. Terms of trade

Drastic worsening of terms of trade for oil and mineral exporters is already apparent. There is a sharp decline in foreign direct investments. In second half of 2008, oil prices declined by 69 percent and non-energy commodity prices by 38 percent. Africa export revenues are expected to decline by 40 percent in 2009 (Ali, 2009). African oil and mineral exporters will receive most immediate impact of the crisis. Expected loss in growth rates in 2009 as compared to 2008 are particularly severe in previously booming economies In South Africa, negative growth is now projected for 2009 (IMF, 2009b).

Oil prices fell from their peak of US$147 per barrel in June 2008 to a recent low of US$ 40.50 a barrel. Price of copper fell from about US$ 4.10 per pound to under US$1.40 per pound. For oil and mineral importing countries, this is good news as the import bill will be cut down. For oil and mineral exporting counties, the sharp decline of prices has had a ripple effect. Zambia, for

example, enjoyed increase of prices of copper for some years. In the third quarter of 2008, total copper export earnings dropped 32.6 percent. Botswana's economy remains over-reliant on minerals - especially diamonds. Diamond revenues are expected to decline by half in 2009. Some exporting countries had already initiated major operations to increase supply. Labour market and the government fiscal position have been negatively affected by such responses. For countries which do not have a heavy reliance on oil and mineral exports, the terms of trade shock is not as big. The contraction of exports is also apparent. In all regions exports contracted faster than GDP. It is forecasted that world trade will contract by 9 percent in 2009. Therefore, they may also face balance of payment problems as the crisis deepens.

CAPITAL FLOW

Capital flows which include foreign direct investment (FDI), portfolio investment flows, worker remittances, private charity, and foreign aid - are thought to have helped fuel Africa's recent economic growth. Between 2000 and 2007, private capital flows were the most important source of external finance for the region, growing from an estimated $8.9 billion in 2000 to $54.8 billion in 2007 or 6.5 times global foreign aid of $8.5 billion.

a. Foreign direct investment

The demand for African commodities drove an investment surge in many countries (Gamberoni and Newfarmer, 2009). Net private capital flows are thought to have quadrupled between 2000 and 2008 (Auboin, and Moritz, 2008). These changes are backsliding in development indicators. There is decreased FDI flow due to tightening of liquidity in global financial markets. FDI flows into Africa are expected to decline in 2009 because of the global economic slowdown. FDI plans in mining exploration in Tanzania were halted with potential long-term consequences. The flows of FDI and portfolio investment are clustered among Africa's oil-exporting economies and South Africa, and may have little impact in many African countries.

The contraction of capital flows to Africa has been sharp. FDI in Africa will drop by roughly 26.7% in 2009, compared to 2008. In 2008, Africa saw the sharpest contraction in cross-border lending of all emerging regions (Khan, 2009). Portfolio investment flows were initially the most impacted by the crisis. These outflows have hit Africa's "frontier economies" the hardest. Foreign investors fled the region's stock markets for safer, more liquid investments at home. Overall, FDI remains the largest share of inward capital flows for the region. It is expected to be a key driver of future growth.

b. Stock markets and banks

Stock market volatility has increased since the onset of the crisis. Wealth losses have been observed in the major stock exchanges. In Egypt and Nigeria, the stock market indices declined by about 67 per cent between 2008 and 2009. Significant losses have also been observed in Kenya, Mauritius, Zambia and Botswana. Turmoil in African stock markets is beginning to have significant negative effects on the financial sector and aggregate demand. It has a negative effect on bank balance sheets. If these trends continue, non-performing loans in the banking sector would likely increase. This has dire consequences for financial stability in the region. In Ghana, the ratio of non-performing loans to gross loans increased from 7.9 per cent to 8.7 per cent between 2006 and the third quarter of 2008. In Lesotho, it increased from 2 per cent to 3.5 per cent over the same period (IMF, 2009c). Bank failures have been rare in the region. Most African banks do not have any significant exposure to the sub-prime mortgage market and asset-backed securities. They are, however, vulnerable to contagion effects arising from the high rate of foreign ownership of banks in several countries in the region.

c. Exchange rates

Depreciation in foreign exchange rates has been taking place. In the first quarter of 2009, the Ghanaian cedi depreciated against the US$ by 14 per cent. Nigerian naira declined by 10 per cent and the Zambian kwacha declined by 13 per cent (ECA, 2009). Significant depreciations over 2009 are expected (ECA, 2009). Exchange rate depreciation against the US dollar will impact negatively the debt-service burdens. Depreciation also results in increased costs of imported intermediate inputs, production, output and employment. Several of these countries have high foreign debt. Expected depreciation of their currencies against the dollar will impose serious debt-service burdens on the region. It will also increase the cost of imported intermediate inputs, with consequences for production, output and employment. Furthermore, several countries in the region are net importers of food. It is a major component of the consumer price index. Expected depreciation of currencies in the region will increase domestic prices of consumer goods. It will reduce access to food by vulnerable groups. Exchange-rate depreciation will also increase exchange-rate risks faced by domestic firms. However, it will increase the likelihood that they will default on loans owed to domestic banks, thereby increasing the vulnerability of these banks.

d. Fall in remittances

Remittances are thought to be the most stable (Ratha, 2003). Africa receives the smallest amount of remittances of any region. Their impact is thought to be relatively large compared to the size of African economies. Africa's extractive industries often provide little economic trickle-down into the local economy. Recorded remittances to Africa totaled $18.59 billion in 2007. Actual amount is likely higher. The region receives a large share through informal transfers and unofficial mechanisms and networks. Within the region, remittances are thought to account for 3.7 percent of GDP on average. There is significant variation among countries. Remittances in Lesotho were 29% of GDP in 2007. Nigeria and Kenya receive the highest value of remittances.

Global remittance levels are, however, expected to fall. Remittance inflows to Africa had increased from $4.6 billion in 2000 to $20 billion in 2008. Financial crisis will reduce remittance inflows to Africa between $1 billion and $2 billion dollars in 2009 relative to 2008 (ECA, 2009). Around 80 percent of remittances to developing countries come from high-income countries. It is vital source of household income vulnerable to economic crises. Such remittances reached a record $251 billion in 2007, but have fallen in many of SSA countries. Remittances to Kenya fell by 12 percent in the first six months of 2009 compared to the same period in 2008. Overall, remittances to developing countries are set to fall by between $25 and $66 billion in 2009 (Cali and Dell'Erba, 2009). In Africa, remittance levels are projected to fall by 4.4 percent in 2009. This is a slightly smaller drop in percentage terms than the worldwide average for low- and middle-income countries (Ratha and Mohapatra, 2009). Remittance levels could fall further if continuing economic troubles cause destination countries to tighten immigration restrictions. The long-term implications are difficult to assess (EIU, 2009).

Small and economically open states are particularly vulnerable to the crisis. They are experiencing falling remittances and FDI (te Velde et al., 2009b). In St Lucia, hotels were 80 percent empty during the peak tourist period in late 2008 and early 2009. Remittances to Tonga fell by 15 percent between June 2008 and June 2009 (Matanga Tonga Online, 2009). Jamaica experienced a drop of 14 percent in the first two months of 2009 (Jamaica Observer, 2009).

e. Foreign aid and official development assistance

Only a small handful of donors including Italy, France, and Iceland have reduced bilateral foreign assistance due to the crisis. Global flow of foreign aid could suffer in the medium term if the global downturn continues. Most aid levels will not be impacted by the crisis in 2009 and

2010. They may drop in 2011 and 2012 as developed countries experience continued fiscal strains and political pressures to balance budgets. Nonetheless, African governments have requested donors to increase aid flows in order to help offset the impact of the crisis on their domestic economies (AfDB/CAFMCBGs, 2009). Analysts continue to debate whether foreign aid has helped or hindered Africa's socioeconomic development in the long run (Sachs, 2006). Many African economies are vulnerable to a downturn in foreign aid flows.

Historically, aid has fallen when donor countries have been hit by recession. Donors increased aid to Africa in 2008 but are already $20 billion short of the commitments made in Gleneagles in 2005. A number of donors now appear to be reneging on their commitments. Italy could halve its aid in 2009, bringing it to 0.1 percent of GNP. DFID is honouring its aid commitments. The falling value of the pound against the dollar and euro means that the actual value of aid has dropped when compared to 2008 values (Bertoli and Sanfilippo, 2009). ODA flows to Africa had increased from $21 billion in 2002 to $38.7 billion in 2007. However, there is concern that the economic crisis has created downward pressure on donor aid budgets. 23 African countries are highly vulnerable to reductions in ODA flows. Liberia, Burundi, Guinea-Bissau, Sierra Leone and Eritrea are particularly vulnerable with extremely high ratios of ODA to gross national income.

SOCIAL AND HUMAN IMPACTS

Africa is the region where progress on the Millennium Development Goals (MDGs) has been the slowest. Those living on less than $1.25 per day has hovered around 50%. The number of poor people, in absolute terms, has nearly doubled, from 200 million in 1981 to 380 million in 2005 (UN, 2007; 2009). There is worst rankings in business environment, governance, logistics, and other trade facilitation indicators (Alberto and Wilson, 2008) Labour productivity is the lowest, on average, of any world region (UN, 2009; WEF, 2009). Due to low levels of regional integration, Africa has consistently had considerably lower rates of intraregional trade than other world regions (UNCTAD, 2009). In addition, African economies continue to be affected by the lingering impact of the 2008 food and fuel crisis. In 2008, already rising global food prices spiked to record heights (FAO, 2008). Those most affected by the crisis were impoverished populations. Many of whom already suffer from chronic hunger. Crisis strained household budgets and compromised individual resilience to further economic hardship. African oil exporters benefited from higher oil prices. Most oil importers ran fiscal deficits as governments subsidized food imports, fertilizer, and other agricultural inputs. Crisis fed high inflation and sparked food riots and political unrest in several countries. The fiscal costs of African policy responses to the crisis doubled between 2007 and 2008, to an average of 1 percent of GDP, according to the IMF.

a. Unemployment

Financial crisis will also have an indirect effect on poverty and unemployment. Unemployment rates in Africa were on a downward path before the crisis. This is true for both males and females. The rate is generally higher for females. Unemployment rate fell from 8.5 per cent in 2003 to 7.9 percent in 2008. The crisis will increase the unemployment rate in 2009. The decreased demand for African export commodities has resulted in significant loss of jobs especially in mineral dependent countries. In Zambia for example, two major mines have closed operations while others have scaled down significantly due to declining demand for copper. This has resulted in the loss of many jobs. In DRC, where artisanal mining was commonly used as an anti-poverty measure; small scale miners have relapsed into poverty because of non-existent demand for their ores. In South Africa, the mining sector has experienced some job losses especially the

platinum sector. The volume of rubber exports from Liberia declined from 135,000 tonnes in 2007 to 88,000 tonnes in 2008 and this decline was accompanied by loss of jobs. The evident impact of the global financial crisis on the employment situation in Africa heightens the need for governments and development stakeholders to design mitigation strategies that can assure decent jobs to prevent many from falling into absolute poverty. Around 81 per cent of African men and 64 per cent of African women were engaged in unstable, insecure jobs, with 55 per cent being working poor (ILO, 2008).

ILO has predicted that the number of working poor in Africa could decrease by 36 million between 2007 and 2009 due to crisis. There has been closure of mines. Prime examples include: mining closures in the DRC, which have resulted in the culling of over 200,000 jobs and an estimated 23,000 registered miners out of work in Zambia. Similarly, the closure of Mittel owned mines and problems in the rubber industry have contributed to a possible 80 percent unemployment in Liberia. The collapse in prices also has longer-term implications (UNIRIN, 2009). Social effects of the crisis will be particularly hard felt in Africa. There are little or no mechanisms to cushion the effect on ordinary people such as unemployment benefits or social security arrangements.

b. Poverty

More households will fall into poverty than would otherwise have been the case (te Velde et al., 2009a). The number of those employed as a result of FDI in Ghana, for example, dropped by around one third between the last quarter of 2007 and the last quarter of 2008. In Kenya, the labour-intensive horticultural industry has suffered a 35 percent drop in exports of flowers. Nearly one in four in the mining sector lost their jobs in 2008 (te Velde et al., 2009a). Poor people and the incidence of poverty have increased dramatically. In the poorest developing countries, health and education outcomes deteriorate. It can have a detrimental impact upon psychological well-being and community and intra-household conflict (Ravillion, 2008). It is crucial for exposed countries to finance job creation, the delivery of essential services and infrastructure, and safety net programmes for vulnerable groups (Cord et al., 2009). The irony here is that the most fragile and weakest states will not be able to raise the necessary funds.

c. Food security

Household poverty will leave many vulnerable and exposed to the food, fuel and financial shocks. Low economic growth in Africa is likely to result in lower agricultural investment and productivity. It increases in the prices of the major cereals, which has further implications for food security and malnutrition. The per capita calorie consumption in Africa will be 10 percent lower in 2020. Globally, 16 million more children will be malnourished in 2020. Africa's share of malnourished children will increase from one fifth in 2005 to one fourth in 2020 (Braun, 2008). Households have been coping with the crises by spending a greater share of income on food, buying lower cost items, reducing the quality and diversity of food, gathering wild foods, eating less or going hungry. Food intake in communities in Kenya was reported to have declined in quantity and in quality with women eating last and least. Children are particularly vulnerable to hunger and malnutrition. This is affecting their ability to learn and attending school altogether (Hossain and Eyben, 2009).

d. Well-being of children

Many household coping strategies are ineffective. Longer-term consequences on human development are a particular concern. There has been increased school absenteeism in Kenya and Zambia. Children are too weak to travel to school or parents can no longer afford education fees (Hossain and Eyben, 2009; Haider, 2009). Infant and child mortality rates are likely to increase

as a result of the crises. Child mortality rates in Africa could rise by about 28 per thousand. Household coping strategies can be particularly harmful to children. It causes increase in the risk of chronic infections and diseases later in life. Households may also spend less on other essential health and welfare services such as clean water and sanitation. There are also concerns that with sustained low incomes, households may be forced to sell assets, including livelihoods assets. The future productivity of individuals and households, and the economy as a whole, can suffer as a result.

e. Violence and social unrest

Across Africa, violence and social unrest could lead to a further eroding of confidence in already weak governments. In Sierra Leone, 60 percent of youths are unemployed. This is enough on its own to threaten stability. The rising unemployment in already fragile states can exacerbate conflict due to comparatively better income opportunities for young men in rebel groups as opposed to labour markets (Collier, 2007). Increases in crime levels are related to unemployment and increasing living costs are a key issue. Instances of children robbing each other of food in schools have been reported. Children are trading sex for snacks in Kenya and Zambia (Hossain and Eyben, 2009). Braun (2008) found that food insecurity has become a source of conflict in many countries. Amnesty International (2009) report that demonstrations against the sharp rise in living costs have taken place in Benin, Burkina Faso, Cameroon, Côte d‟ Ivoire, Guinea, Mali, Mozambique, Senegal, Somalia and Zimbabwe. Arbache and Page (2007) argue that institutions in poor countries tend to be so strained that ethnic tensions and confrontational politics can get worse when competition for scarce resources increases. In Nairobi, tensions have emerged between Christian and Muslim groups because of exclusionary feeding programmes in mosques (Hossain and Eyban, 2009). Many governments are unable to provide necessary social safety nets, services and infrastructure. A major concern is if governments are unable to pay their civil service and security forces. This leaves a power vacuum that is all too frequently filled by an agent of instability, either a transnational terrorist group or criminal activity such as drug trafficking (Jackson, 2009).

EFFORTS TO ADDRESS THE IMPACT OF THE CRISIS

African governments have set up economic monitoring units and deployed limited fiscal and monetary resources. Steps taken have included fiscal stimulus packages (e.g. Mauritius, South Africa), targeted assistance to certain sectors (Nigeria, Uganda), expansionary monetary policy (Botswana, Namibia, South Africa), and bond financing of public expenditures (Cape Verde, Kenya). Nevertheless, most African governments have little capacity to fund policy interventions to address the crisis. Effective economic governance continues to be lacking in many countries. Responses are projected to be restrained by the relative unavailability of foreign reserves, insufficient budgetary margins for enacting fiscal stimulus packages, and restrictions on incurring further external debt in countries that have benefited from international debt relief. High levels of corruption could additionally impede the effectiveness of government responses to the crisis.

a. Country-specific responses

African countries have taken several steps to mitigate the impact of the financial crisis on their economies, including interest rate reductions, recapitalization of financial institutions, increasing liquidity to banks and firms, fiscal stimulus packages, trade policy changes, and regulatory reforms. The measures adopted differ from country to country, depending on available counter-cyclical policies because they accumulated huge foreign reserves during the recent oil price hikes. In the non-oil economies, however, the ability to adopt counter-cyclical policies is severe-

ly limited and so the use of fiscal stimulus measures is not widespread in these economies. In addition to the above measures, some countries have set up task forces or committees to monitor the financial crisis and advise the Government on how to respond. Rwanda, Kenya, Nigeria and the Democratic Republic of the Congo are examples of countries that have adopted this approach.

b. Regional responses

African ministers of finance and planning and governors of central banks met in Tunis, Tunisia, on 12 November 2008. They discussed the implications of the financial crisis for Africa and to identify appropriate policy responses to cushion its impact in the region. The meeting was jointly organized by the Economic Commission for Africa, the African Development Bank, and the African Union Commission. Following are some key policy responses that were stressed by African policymakers at the meeting:

- Countries need to undertake a comprehensive review of their regulatory and supervisory regimes with the view of identifying areas for further improvement.
- There is a need to deepen economic reforms further. This would help minimize the effects of the crisis and lay the foundation for sustainable growth in the region.
- While measures aimed at restoring growth and financial stability are important, they must be accompanied by measures to minimize the potential negative social impact of the crisis in poor countries. Giving priority to social protection and pro-poor expenditure is important in this regard.
- Official development assistance can also play an important role in augmenting shrinking domestic resource bases arising from falling exports, remittances and tourist receipts.
- Strengthening developing countries' voice and representation by reforming the governance of international financial institutions is also crucially important.

c. Developed Countries

- At the Group of 20 (G-20) summit in London in April 2009, members agreed to inject $1 trillion into the world economy in order to combat the effects of the global crisis. This included a commitment to support growth in emerging market and developing countries (Africa Progress Panel, 2009).
- At the July 2009 G-8 summit in L'Aquila, Italy, members declared that they were "determined to assist developing countries in coping with the impact of the [economic] crisis" and committed to fulfilling the Gleneagles commitments on aid and improving aid effectiveness, and strengthening global initiatives to achieve the MDGs and other anti-poverty goals (G-8 Declaration, 2009).

d. International Financial Institutions

- The World Bank, African Development Bank (AfDB), and the IMF have all stepped up lending to the region since the onset of the financial crisis. These institutions have also reformed several of their existing loan and assistance programmes, or created new facilities, to target their efforts to aspects of the current crisis. These include, for example, the IMF's Exogenous Shocks Facility, the World Bank's new Financial Crisis Response Fast-Track Facility and Infrastructure Crisis Facility, and the AfDB's new Emergency Liquidity Facility and Trade Finance Initiative. These are aimed at offsetting budget shortfalls, increasing liquidity, and providing financing for infrastructure and trade finance, all of which are considered by many analysts to be crucial to Africa's eventual economic recovery.

- The World Bank and the AfDB share a development focus, and provide financing for projects as wide-ranging as heavy infrastructure, education and health policies, financial sector development, and natural resource management. World Bank lending to Africa in its 2009 fiscal year (July 1, 2008-June 30, 2009) was $9.9 billion, up 36% from $7.3 billion in FY2008 (World Bank, 2009). The AfDB, according to its president Donald Kabaruka, is on target to commit $11 billion in 2009, doubling its 2008 commitments (Reuters, 2009). Much of this assistance is at highly discounted interest rates.
- AfDB announced four new crisis-response initiatives in March 2009: a $1.5 billion Emergency Liquidity Facility (ELF); a $1 billion Trade Finance Initiative (TFI); a framework for accelerated transfer of African Development Fund resources to eligible countries; and enhanced policy advisory support.
- In addition to various ongoing and new projects addressing infrastructure, governance, macroeconomic policy, skills development, humanitarian relief, and other areas, the AfDB has approved several loans in recent months designed primarily to offset the impact of the global economic crisis.
- The IMF has also accelerated long-standing efforts to revamp its lending and policy support programs for African borrowers and other low-income countries.

CONCLUSION

African countries have taken important steps at the national level to mitigate the impact of the financial crisis on their economies. However, financial constraints limit the range of policy measures that countries in the region could adopt in response to the crisis. In this regard, the international community needs to provide appropriate assistance to the region to prevent the financial crisis from turning into a regional humanitarian crisis. The main areas where international action is needed to help Africa deal with the crisis are outlined below:

- Minimizing the risk of the global economic crisis means addressing both vulnerability and resilience of African population. The global community as well as African countries will need to act in this regard, specifically in terms of mitigating the impact of the shocks; coping with the effects of the crisis; and reducing risk by instituting proper measures to limit vulnerability and build resilience over the longer-term.
- Mitigation measures, to be undertaken by both the international community and African countries, include: (a) monitoring the impact of the crisis; (b) restoring confidence in, and continuing to monitor and regulate banks; (c) expanding trade (also through aid for- trade programmes) and avoiding creeping protectionism; and (d) expanding trade finance.
- Of the foregoing measures, the expansion of trade is perhaps the most crucial, as much of the adverse shock to Africa is due to a decline in exports. Expanding trade is, however, largely dependent on the international community. The role of African governments in mitigation would be to (a) monitor the impact of the crisis; (b) monitor and regulate their own banking systems and check for early signs of bank difficulties; (c) maintain or promote a positive stance towards trade liberalization and open markets; (d) lobby for a satisfactory conclusion of a more appropriate, development oriented Doha Round; (e) work towards improving the supply capacity of African countries, for instance through public works programmes targeted towards infrastructure and transport services; and (f) maintain competitive real exchange rates and encourage further regional integration and regional trade facilitation measures.

- Coping actions, would include (a) expanding domestic demand through fiscal and monetary stimuli; absorbing financial losses through establishing foreign reserves; supporting the vulnerable through appropriate social safety nets with the help of aid; (d) expanding self-employment; (e) utilizing technical assistance in the design and implementation of programmes; and expanding peacekeeping operations where needed.
- The international community's role in mitigation measures is to facilitate the demand for Africa's exports, which is a general and cross-cutting task. Whereas, in measures designed to help countries cope with the effects of the crisis, the international community needs to be more alert to country-level differences. This is where it is important to be able to identify countries most at risk, and to ensure that assistance is tailored to specific circumstances. Such assistance would be two fold (a) assisting African governments with financial resources so as to alleviate poverty and maximize the level of such aid's effectiveness; and (b) providing technical assistance or even peacekeeping operations, if necessary. African governments, in turn, should take care that expansionary policies do not lead to unsustainable budget deficits or debt burdens, and that the appeal of private sector activity is improved.
- African countries need to reduce risk; it is not enough to merely mitigate risk or cope with risk. What is required is diversification of economies, improvement of the environment to enable successful business, and reform of the global financial and aid architecture.
- In sum, a major change in economic paradigm is required in Africa. It is important that African economic policy makers learn some key lessons from current global financial and economic crisis and the re-awakened old debates about structural economic transformation. There is urgent need to reorient and rethink the trade and industrial strategies in African countries. In order to promote sustainable industrial development, the focus should be on domestic resource mobilization. Besides, the government should put in place policies to attract domestic savings to minimize the effects of capital flight associated with FDI.

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THE ROLE OF STANDARDS IN INFLUENCING GHANA'S ACCESS TO GLOBAL MARKET FOR COCOA

Gbadebo Olusegun Odularu
Regional Policies and Markets Analyst, Forum for Agricultural Research in Africa (FARA), Accra, Ghana
E-mail: godularu@fara-africa.org

Abstract: In Africa, Farmers' access to market is relatively insignificant partly due to numerous supply-side constraints and shortage of capacities to enforce trade agreements and comply with global standards. Against this background, this paper discusses the role of food safety standards in influencing Ghana's access to global market for cocoa. Employing gravity model of agricultural product trade to measure the impact of CODEX Maximum Residue Levels (MRL) on Ghana's exports of cocoa, the results reveal that food safety standards imposed by importing countries have a negative impact on Ghana's access to the global market for cocoa products. However, since its effect is not statistically significant effect, the exports of Ghana's could is largely influenced by other non-standard factors such as increasing global demand for its highly reputable beans as well as the previous levels of output. More importantly the significant impact of output emphasizes the role of potential capacity in promoting access to markets for the Ghanaian cocoa beans.

INTRODUCTION

Over time, market access for agricultural commodities have bordered continually on various levels of standards[1] and brands. This is partly due to increasing consumer concern with food safety and massive investments in brand development and protection by large-scale multinational supermarkets and processors in food value chains. Thus, standards and technical regulations continue to attract increasing attention in ongoing global trade policy dialogue as tariff and quota issues seem to assume a declining importance. The growing emphasis on certification in agricultural trade, in the face of increased globalization and rapid trade liberalization has attracted considerable public debate on the impact of Sanitary and Phytosanitary (SPS) on regional and international market access for agricultural commodities in Africa. In addition to hindering access to markets for agricultural commodities produced by smallholder farmers in Africa, standards also raise the cost of agricultural exports, thus, serving as disincentives to smallholder farmers.

Further, simultaneous application of numerous standards and multiple technical requirements, the rising costs and difficulties of testing and verification procedures, and rapidly changing consumer preferences of overseas markets raise the entry and compliance cost of accessing global markets. Many African smallholder farmers shut down business because the global competition for their products has raised the standards that should be met before they could gain access to global markets.

In addition to influencing the export opportunities of African smallholder farmers[2], SPS protection measures are legitimate concerns in order to secure human, animal and plant health, they seem to pose trade diverting impacts on Africa agricultural exports because the costs of compliance with these measures are high. In view of this high-cost compliance, the World Trade Organization (WTO)[3] has signed the SPS Agreement which places certain restrictions on SPS

[1] Standards and certification issues involve food safety standards, fair trade standards, organic standards, labour standards, and several kinds of environmental standards and labels.

[2] Arne Wiig & Ivar Kolstad, 2003. ' Lowering Barriers to Agricultural Exports through Technical Assistance.' WP 2003:8; Development Studies and Human Right. Chr. Michelsen Institute (CMI), Norway.

[3] SPS measures must be transparent, non-discriminatory, and scientifically justified by harmonizing sanitary or phytosanitary measures with internationally agreed standards, guidelines or recommendations from the Codex Alimentarius Commission (CODEX), the International Office of Epizootics (OIE), and the International Plant Protection Convention (IPPC), or a country may undertake an individual and independent risk assessment. An importing country cannot impose different requirements on imports than on domestically produced goods (national treatment), nor can it favour imports from certain countries (most favoured nation). Members must adopt other approaches that will ensure safety insofar as the exporting member objectively demonstrates that its measures achieve the importing member's required level of sanitary or phytosanitary

measures. However, this agreement still provides ample discretion to an importing country to impose SPS regulations on its exports.

While Africa is one of the largest markets in terms of food supply and consumption, few empirical studies have focused on how certification and technical regulations affect market access for its cocoa beans. Though, there has been some work on SPS measurements and descriptive analysis of the characteristics of the smallholder cocoa farmers, there seems to be few accessible multivariate econometric analysis using policy variables, such as standards, to examine the impact of SPS on market access for Ghanaian cocoa beans.

In view of this, the purpose of this paper is to measure the effect of food safety standards on Ghana's access to the global cocoa market. This paper is organised as follows: In addition to the first section as introduction, section two presents some background information about the Ghanaian cocoa sub-sector and the types of quality and standards issues that it faces. Section three reviews the relevant literature, while the fourth section discusses the empirical strategy, model specification, and data sources. The fifth section conducts the econometric analysis and discusses its results. Section six concludes the paper and presents some key policy implications.

STUDY BACKGROUND

Over 70 per cent of global cocoa output and revenue are attributable to the smallholder farmers in Ivory Coast, Ghana, Nigeria and Cameroon. However, Ghana is the world's second largest producer of cocoa beans after Ivory Coast. While its cocoa output increased from 395,000 MT in 2000 to 740,000 MT in 2005, cocoa's share in GDP rose from 4.9 per cent in 2000 – 2004 to 8.1 per cent in 2005/2006 (Breisinger, Diao, Kolavalli and Thurlow, 2008)[4]. Further, the IFPRI report shows that cocoa has a strong economic linkage with other sub-sectors such as cocoa processing (milling and butter), and food industry (beverages, bakery, et cetera). Thus, cocoa remains one of the most important agricultural export commodities for Ghana's drive to achieving the UN Millennium Development Goals (MDGs) as well as the objectives of the Comprehensive Africa Agricultural Development Programme (CAADP)[5]. The Ghanaian cocoa sector plays a crucial role in the provision of employment opportunities, food security, household incomes, and raw materials for the agro-allied industries. As a major foreign exchange earner, cocoa is of tremendous significance to the government and smallholder farmers.

Like other export crops, cocoa production is concentrated in the South and carried out by around 1.6 million farmers (Wolter, D, 2008). In spite of the availability of modern farming techniques, improved access to credit, partial liberalization of cocoa marketing, and pro-poor economic reforms which have resulted in increased productivity, there still exists potential for improved output as current yields remain 60 per cent lower than attainable yields (Wolter, 2008).

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measures if they have a significant effect on trade. However, under the SPS Agreement, DCs are obliged to provide technical assistance to Africa in order to help them comply with SPS measures.

[4] The exports of processed cocoa increased from US$83.6million in 2004 to US$152.9 million in 2006 (See Breisinger C., Diao.X., Kolavalli. S., and Thurlow., J., 2008).

[5] CAADP is one of the most crucial programmes of the African Union's New Partnership for Africa's Development (NEPAD) Planning and Coordinating Agency (NPCA) agenda. The New Economic Programme for Africa's Development (NEPAD) is a strategic initiative by African leaders to eradicate poverty and place their countries, both individually and collectively, on a path of sustainable growth and development while at the same time contributing to the global economy.

Challenges in Meeting International Quality Cocoa[6] Standards

Over the decades, Ghana has produced well-fermented cocoa[7] that attracts a high premium. Its cocoa quality assurance activities have included adherence to promulgated laws, administrative directives and legislative instruments in an attempt to increase buyers' confidence and trust in Ghana's cocoa beans and also maintain the beans as a benchmark for assessing cocoa from other exporting countries of origin. However, Ghana faces several emerging challenges in ensuring that the consistency of the quality of supplied cocoa is high and also accessing the regional and international markets for cocoa. Some of the standards challenges that militate against Ghanaian cocoa exporters in an attempt to comply with international quality standards could be discussed as follows:

The natural factors and environmental elements such as rainfall and sunshine determine the robustness of cocoa beans. Since cocoa production in Ghana is largely small-scale, rain-fed, and sun-dried/processed, the management of vegetation has a significant impact on the quality of its output. In periods of adequate rainfall distribution and regular sunshine (temperature)[8], beans sizes are considerably improved. On the other hand, erratic rainfall, drought and bad vegetation results in poor bean formation, making it impossible to ensure the supply and delivery of uniform cocoa beans size. Thus, environmental mismanagement, in the face of increasing climate variability adversely affects Ghana's ability to meet international quality standards in terms of uniformity of cocoa beans sizes.

High levels of chemical residues: over time, there have been some complaints about high levels of chemical residues in cocoa beans in general. Interestingly, the chemical with high maximum residue levels (MRLs) are often the unapproved and untested types by the Cocoa Research Institute of Ghana (CRIG). These unapproved agro-chemicals are meant for other crops and not cocoa. Unfortunately, they are openly displayed and sold to unsuspecting cocoa farmers. The high chemical residue levels could be solved by enforcing compliance with the adoption of good cultural practices, better and regular education of the farmers and the education of the retailers and distributors of the chemicals as well as a training of spraying gangs in the proper applications chemicals.

***Presence of heavy metals*:** Heavy metals such as lead and boron have been detected in cocoa and cocoa products. The source of these heavy metals is the soil. There is an absence of relevant equipment to detect such metals in the soil and cocoa beans. Thus, there is the need to effectively analyze the soil in the demarcated suitable areas of cocoa cultivation where such metals are likely to exist and to prescribe means of neutralizing the effects of such metals.

Use of jute sacks for the export of cocoa: Studies have revealed that Ghanaian cocoa beans which are shipped in bulk poses no problem with infestation at ports of destination. However, the seams of the jute sacks have been the source of infestation in cases where the export of produce is done in jute sacks. This contributes to cases of refumigation at destination and therefore Gha-

[6] International Cocoa Standards require cocoa beans to be fermented, dry, free from smoky beans, free from abnormal odours and free from evidence of adulteration. The cargo must be reasonably free from living insects, broken beans, fragments and pieces of shell and foreign matter and reasonably uniform in size. Cocoa cargo is graded on the basis of the count of defective beans in the cut test. Defective cocoa beans should not exceed the following limits: grade I cocoa beans (mouldy, slaty, insect damaged, germinated or flat beans; maximum 3% by count); grade II cocoa beans (maximum 4% by count, insect-damaged, germinated or flat beans, maximum 6% by count).

[7] The required quality specification of dry cocoa beans as stated in a typical sales contract include the following among others: Superior quality/good fermentation (containing not more than 5% slaty beans and not more than 5% of all other defects); Fair average quality/fair fermentation (containing not more than 10% of all other defects - mouldy, germinated, flat, insect attacked); Number of beans per 100 gm wt should be main crop beans or light crop beans; Uniformly fermented cocoa, dry beans with moisture content of 7.5%, uniform size, homogeneous in all other respects; Fit for the production of foodstuff; Virtually free from foreign matter and adulteration, contamination, live insects, rodents or other types of infestation; Reasonably free from flat beans, germinated beans and residue.

[8] A moisture content of 7.5 – 8% is indicative of proper drying. Insufficient drying makes the inside and outside of beans moulding, which later results in high free fatty levels and off-flavours.

na's inability to meet certain cocoa beans standards. Cultural practices in the fumigation of cocoa could be improved by using insecticides with long lasting effect on the seams of the bags to reduce infestation. There are occasions when exportable cocoa has been certified to be of wholesome quality on inspection just prior to shipment only to be reported by the buyer that the cocoa was infested or did not meet international standards upon arrival at the destination. Such cases could be due to cross-infestation.

Mode of shipment: cocoa beans are shipped from Ghana to various destination markets. Unfortunately, some buyers prefer the use of traditional ship holds for the import of cocoa beans. The use of ship holds especially for bagged cocoa exposes the cocoa to infestation of all kinds. Rats infested ship holds encourage rat infestation where droppings and urine could contaminate the cocoa. The cocoa bean in such a hold is predisposed to insect cross infestation in cases where infested produce are in close proximity.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

According to Maskus and Wilson (2001), trade literature presents four approaches for studying standards, regulations and trade. These methods include: surveys of firms' cost responses to regulations, macro-level econometric analysis of standards and trade, partial equilibrium models, and computable general equilibrium (CGE) models. Based on the econometric methods, Maskus and Wilson (2001) discusses that standards and codes have offsetting impacts on costs. Adapting with mandatory standards and certification measures in import-specific countries raises the compliance costs and should reduce trade. However, these standards should reduce the cost of information acquisition on market preferences and product quality, thereby providing the incentives for trade facilitation. In most cases, this reduction in information costs is applicable to manufacturing commodities. Table 1 presents a summary of this analysis:

Table 1: Predications of Theoretical Literature about Standards and Trade

Theory	Shared Standards	Country-Specific Standards Importer	Country-Specific Standards Exporters
Non-Tariff Barriers			
• Mainstream / strategic alliances	+	-	
• Competitive disadvantage		+	-
• Standardization trap	+	-	-
Competitive Advantage		-	+
Loss of Variety	-	+	+

Source: Maskus and Wilson (2001).

There is increasing empirical evidence of the adverse impact of standards on market access. Yue, Kuang, Sun, Wu and Xu (2010), while adopting a gravity model, it analyses the impact of EU's new food safety standards on China's tea export. It shows that the new EU Food Safety Act

has had a significantly adverse impact on the major tea exporters as shown in the decline in export volume[9].

Further, Mehta (2010) also adopts a gravity model to analyse the impact of developed countries (DCs)' food safety regulations on India's export of processed food. The results reveal that India exports will fall by 156 per cent due to higher stringent food safety standards in the DCs. Drogue and DeMaria (2010) measures the impact of the MRL of pesticides on market access for apples and pears. It calculates the similarity index of the difference in the tolerance levels of both importing and exporting countries and use this to assess the impact of differences in MRL of pesticides on trade of apples and pears of seven exporting and seven importing countries. In conclusion, it finds that harmonization of regulations has offsetting impacts on trade depending on the country of export[10].

Jongwanich (2009) uses a panel data econometric gravity model to assess the impact of food safety standards on processed food exports from developing countries. The study concludes that food safety standards imposed by DCs could impede the exports of processed food from developing countries partly because SPS measures are less transparent than tariffs or quotas. Further, the supply-side constraints (resources, manpower, and institutions) in developing countries increase the compliance costs, thereby complicating the food safety standards situation for developing countries. However, due to the potential benefits which are accruable from the imposition of food safety standards such as a reduction in transaction costs and trade friction, developing countries should view SPS not just as a trade hurdle but also as an opportunity to upgrade the quality of their products and also have greater access to global markets.

Chen, Yang and Findlay (2008) measure the effect of food safety standards on China's agricultural exports (vegetables, garlic, onions, spinach and fish). Using a gravity model of agricultural product trade to test the effect of the residue standards on China's export of vegetables (Chlorpyrifos MRL) and aquatic products (Oxytetracycline MRL), it shows that food safety standards imposed by DC have a negative and statistically significant effect on China's export of these selected agricultural products.

Gebrehiwet, Ngqangweni and Kirsten (2007) quantify the trade effect of OECD countries' SPS on South African food exports. Utilizing a gravity model, it specifically estimates the trade effect of total aflatoxin level set by five OECD countries (Ireland, Italy, Sweden, Germany, and USA), on South African food exports. It finds that if the selected five OECD countries adopt the recommendable aflatoxin level by CODEX, South Africa would have exported an additional US$ 69 million worth of food per year to these countries between 1995 – 1999.

Wilson, Otsuki and Majumdsar (2003) adopt a gravity model to analyze the impact of drug residue standards on trade in beef and found that Tetracycline standard in beef has a negative and statistically significant impact on global trade in beef. It predicts that if international standards set by CODEX were followed in antibiotics, global trade in beef would rise by over US$3.2 billion. Wilson and Otsuki (2002) also suggests that if government followed international standards for pesticide residue in bananas, instead of national standards set by many DCs, African banana exports would soar by about US$410 million a year.

In an analysis of the trade impact of European food safety standards on African exports, Otsuki and Wilson (2001) find that the new harmonized European standard on aflatoxin B1- a common contaminant affecting agricultural products – is estimated to cost African exporters over US$670

[9] Quantitatively, the study shows that a percentage reduction in the EU MRL will correspondingly result in 61.6% decrease in Chinese tea exports. However, in practice tea exports in China to the EU did not drop as fast as the theory suggests.

[10] http://www.iatrc.software.umn.edu/activities/.../2010Dec-DrogueDeMaria.pdf

million per year in lost nut and grain exports[11]. Further, the cost of not adopting a uniform international standard on aflatoxin (B1) is estimated at US$38.8 billion in lower global cereals and nuts trade. While estimating the impact of the EU's new aflatoxin standards on food imports from Africa, Otsuki and Wilson (2001) use a gravity model and concludes that the implementation of the new standard will have a negative impact on African exports of cereals, dried fruits and nuts to Europe.

EMPIRICAL STRATEGY AND MODEL SPECIFICATION

Gravity models explore the interaction between two areas as a function of the concentration of relevant variables in the two areas, and of the distance between them. They have been utilised in the studies of preferential trade schemes, regional trade blocs and bilateral trade flows[12]. In fact, gravity model is one of the most effective methodologies used in trade policy literatures to estimate the impact of product standards and technical regulations on trade flows.

Theoretically, a gravity model is compatible with neo-classical models within the framework of utility theory (Chen et al, 2008). By implication, a gravity equation states that the trade between regions depends on the bilateral barriers between them relative to average trade barriers that both regions face with all their trading partners (multilateral resistance).

In view of this, this paper adopts a gravity model to measure the effect of food safety standards on Ghana's access to the global cocoa market[13]. According to Kimura and Lee (2006)[14], the model for this study is specified as follows:

$$TX^k_{ij} = A_0\,(X_i,)^{\alpha 1}\,(IM_j,)^{\alpha 2}\,(R_{ij})^{\alpha 3},\ u_{ij} \qquad (1)$$

where TX^k_{ij} is the export value of commodity k from exporting country i to importing country j. The Xi represents the vector of exporting country variables, IM_j are importing country variables, R_{ij} represents the vector of restraining variables, and u_{ij} is the random error term. In this study, the exporting country is Ghana and the vector of exporting country variable Xi, is the output of Ghana in commodity k. The importing country variable IMj, is the GDP of importing country j. The restraining variables include MRL standards of pesticide in commodity k imposed by importing country j.

Log-linearising equation 1 gives the empirical version of the model, which is similar to Chen, Yang and Findlay (2008) and Yue et al (2010):

$$ln\ TX^k_{ij} = \alpha_0 + \alpha_1\ ln\ OPT^k_i + \alpha_2\ ln\ WYPC_j + \alpha_3\ MRL^k_j + \varepsilon^k_{ij}. \qquad (2)$$

The dependent variable (TX) is the export value of cocoa beans from Ghana to the world. The period covers from 1960 to 2010. The output of Ghana cocoa, denoted by OPT, is used as the mass factor in the model. Previous studies reveal that it is more appropriate to use the output (OPT) of the specific product in Ghana rather than Ghana's GDP as the mass factor in the gravity model[15]. This factor captures the supply side effect of the export of the commodity. The output of a commodity represents the potential capacity for export. This variable is expected to be posi-

[11] Otsuki, T, Wilson, J.S. and M. Sewadeh, 2001. 'Saving Two in a Billion: A Case Study to Quantify the Trade Effect of Food Safety Standards,

[12] Some of the studies that have adopted gravity models include *inter alia*: Chen et al, 2008; Yue, et al, 2010; Mehta, 2010; Jongwanich, 2009; Gebrehiwet et al, 2007; and Wilson, Otsuki and Majumdsar, 2003.

[13] Ghana is one of the largest cocoa producers and exporters in the world. It contributes the most significant share of the total cocoa production and exports in Africa. Cocoa as an agricultural commodity was chosen because it has been the most important traditional export crop in Ghana for decades. In addition, it has been one of the main targets of SPS regulations over time.

[14] Kimura F., and H. Lee., 2006. 'The Gravity Equation in International Trade in Services.' *Review of World Economics, Vol. 142 (1).*

[15] See Chen, Yang, Findlay (2008); Hillberry (2002) and Evans (2001) for a discussion about the output variable instead of aggregate state GDP in the regression.

tive to Ghana's export of cocoa. The output in current year might be endogenous as it could be affected by the current export opportunities. However, in order to avoid the potential endogeneity problem output is lagged one year. The data for cocoa export and output is obtained from the FAO statistical database[16].

The world's gross domestic product per capita, denoted by *WYPC*, is used as another mass factor in the model. This factor captures the purchasing power and the market size of the importing country, that is, the demand side effect of the commodity. This mass factor is expected to have a positive effect on Ghana's export of the cocoa. The data are from the World Development Indicators (WDI) database, and are at 2002 constant U.S. Dollars.

Finally, the MRL standard of pesticide denoted by *MRL*, is used as another restraining factor to investigate the effect of food safety standards on Ghana's access to the global market for cocoa. Since 2001, the Codex Alimentarius Commission (CODEX Committee on Cocoa Products and Chocolate) endorsed and increased[17] the maximum levels for contaminants in chocolate and chocolate products. In order to conduct a statistical analysis on the impact of the change in maximum pesticide residue standards on Ghana's cocoa exports to the world market, the model uses a dummy variable. The model adopts '0' for the years on and before 2001, and '1' for the years thereafter.

REGRESSION RESULTS AND EXPLANATIONS

In order to ascertain the stationary status of the variables, unit root tests were conducted at levels and at first difference (See Annex 1). Since most of the variables are stationary at first difference, using the Ordinary Least Squares (OLS), cocoa export was regressed on the other independent variables (See Annex 2).

The regression results are reported in Table 2. The regression of the model is relatively good. The variable of Ghana's output of cocoa (with one-year time lag) is positive and statistically significant for the model, which indicates that Ghana's exports of cocoa will increase with the increase in domestic production capacity. The variable of world GDP is positive but not statistically significant. This implies that larger global market size and higher purchasing power in the rest of the world will increase demand for cocoa exports for Ghana. However, this factor is not strong enough to explain the changes in the demand for Ghana's cocoa.

Table 2: Regression Results for Ghana's Access to the Global Market for Cocoa

Variables	Coefficients
LOPT	0.28 (5.48)
LWYPC	0.93 (0.46)
LTX	-0.57 (-4.44)
MRL	0.008 (0.12)
R^2	0.55
F-statistics	9.8
T-statistics are in parentheses.	

[16] See http://faostat.fao.org/faostat.html
[17] ftp://ftp.fao.org/codex/ccfac33/fa0115be.pdf

Though the world GDP is insignificant in explaining the access to market for cocoa, it shows a direct correlation with market access for cocoa.

Interestingly, the MRL is positive but statistically insignificant. Since this conforms to the a priori expectations[18] of a positive relationship with Ghana's exports of cocoa, this implies the CODEX imposes a lower pesticide limit on the world market for cocoa. Thus, as the CODEX cocoa food safety standard gets stricter, and the Ghanaian cocoa export becomes smaller. Stricter MRL standard has adverse impact on Ghana access to global markets for cocoa. From this, it is apparent that if CODEX Committee on Cocoa and Chocolate sets stricter pesticide residue standards, the cocoa export will severely be affected. The degree of the impact is measurable in the sense that if there is a 1, 000 points decrease in MLR, which means a tighter standards, this will reduce the value of cocoa export by 7 units. Although these stricter food safety standards implies a much safer cocoa and chocolate for the world (especially the DCs), this is at a cost of the Ghanaian cocoa sub-sector which will likely export less and earn less foreign exchange.

The model also performed very well with an averagely high explanatory power. The R squared adjusted explains that cocoa output, world demand for cocoa, and standards drive about 55% of the changes in exports of cocoa in Ghana. F statistics is significant at 1% level. The Durbin Watson Statistics[19] of 2.46 is relatively high and this suggests the presence of autocorrelation.

CONCLUSION

Promoting access to regional and international markets for cocoa is crucial for alleviating poverty and improving livelihoods among the thousands of smallholder cocoa farmers in Ghana. However, farmers' access to market is relatively insignificant because partly due to numerous supply-side constraints, increasing use of non-tariff barriers, shortage of capacities to enforce trade agreements and comply with global standards, and seemingly declining opportunities from trade preference schemes. More specifically, as the roles of standards in accessing markets become increasingly important, Ghanaian farmers are faced with the emergence of voluntary regulatory systems, mandatory certification, and sanitary and phytosanitary (SPS) measures.

In summary, this paper measures the impact of food safety standards on Ghana's access to global market for cocoa. Adopting a gravity model to quantify the impact of MRL on Ghana's exports of cocoa, the results reveal that food safety standards imposed by CODEX have a negative impact on Ghana's access to the global market for cocoa products. In other words, Ghana's experiences in accessing international markets for cocoa products suggest that the effects of SPS and TBT barriers are costly and unfavourable. Higher cocoa safety standards imposed by CODEX have a negative, (though insignificant) impact on Ghana's exports of cocoa. In this view, Ghana should also perceive cocoa standards not just as a trade hurdle but also as a fertile avenue to upgrade quality standard and market access. In spite of the fact that standards do not strongly influence the market access, agro-chemical residue issues have become one of the most critical and topical issues in market access for Ghana's cocoa. By implication, cocoa farmers should continually adopt and adhere to good agronomic (and agricultural) practices[20] and also improve on the good cultural practices that they apply.

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[18] $\alpha_3 > 0$

[19] The DW statistics value ranges from 0 to 4. The ideal value should be 2. Significant values above 2 suggests negative auto correlation while those below 2 suggest positive auto correlation.

[20] Good Agricultural Practices include among others: Choice of good soil to enhance plant establishment; Good land preparation and soil fertility maintenance; Use of prescribed planting material; Low shading to enhance plant establishment; Regular and proper weed control; Adopting the right spacing in planting; Thinning out of the plant to ensure the recommended spacing for good aeration; Pruning of the matured plants; Control of diseases, pest, parasites, etc; provision of wind breaks; Harvesting of ripe pods regularly; Breaking the harvested pods at the right time with little or no damage to the beans; Fermenting the beans in the prescribed manner and for the recommended duration of the fermentation process;

Based on this empirical study, Ghana's access to the global market for cocoa is influenced largely by other non-standard factors such as domestic production capacity, increasing global demand for its highly reputable beans. More importantly the statistically significant impact of output emphasizes the role of potential capacity of Ghana to expand output and also increase export. In other words, there is a need for Ghana to overcome its supply-side constraints in terms of limited manpower, institutions, laboratory and infrastructure. Thus, there is a dire need to strengthen and support initiatives which are designed to enhance the capacities of Ghanaian cocoa farmers to increase productivity and reduce the adverse impact of the food safety standards on its access to the global market.

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Sun-drying the beans on a raised platform for at least 10 days for good sunshine regime; Polishing and spreading out the beans during drying and picking out the black/defective, and flat beans; Beans that have fallen through the members of the mat need not be collected and added to the beans on the mat; Dry beans should not be stored in infested receptacles/bags/materials and should not be in close proximity to sources of smoke; Beans for sale should be thoroughly dry, of 7.5% moisture content and kept in clean 'B' twill food grade sacks; and Proper post-harvesting warehousing management and pest control practices.

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Annexure 1

Unit root tests

Unit root of lopt (at levels)

Null Hypothesis: LOPT has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic based on SIC, MAXLAG=2)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.805462	0.8061
Test critical values:	1% level	-3.615588	
	5% level	-2.941145	
	10% level	-2.609066	

The series has unit root since the t statistic (-0.805462) is less than the 1% critical value (-3.615588)

Unit root of lopt (at first difference)

Null Hypothesis: D(LOPT) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic based on SIC, MAXLAG=2)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.746723	0.0000
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

It is stationary since the t statistics is greater than the critical value

Unit root of ltx (at levels)

Null Hypothesis: LTX has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic based on SIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.939484	0.7642
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

*MacKinnon (1996) one-sided p-values.

Unit root of ltx (at first difference)

Null Hypothesis: D(LTX) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=2)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.688804	0.0000
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

*MacKinnon (1996) one-sided p-values.

Unit root of lwypc (at levels)

Null Hypothesis: LWYPC has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic based on SIC, MAXLAG=2)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.139299	0.0124
Test critical values:	1% level	-4.226815	
	5% level	-3.536601	
	10% level	-3.200320	

*MacKinnon (1996) one-sided p-values.

Unit root of lwypc (at first difference)

Null Hypothesis: D(LWYPC) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic based on SIC, MAXLAG=2)

		t-Statistic	Prob.*

Augmented Dickey-Fuller test statistic		-5.327581	0.0001
Test critical values:	1% level	-3.626784	
	5% level	-2.945842	
	10% level	-2.611531	

*MacKinnon (1996) one-sided p-values.

Annexure 2

OLS estimates

Dependent Variable: LTX
Method: Least Squares
Date: 02/27/11 Time: 23:27
Sample: 1970 2008
Included observations: 39

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LWYPC	-0.232851	0.191851	-1.213704	0.2330
LOPT	0.807393	0.082323	9.807677	0.0000
MRL	0.124489	0.098813	1.259851	0.2161
C	4.207930	1.825943	2.304524	0.0272

R-squared	0.850647	Mean dependent var	12.55549
Adjusted R-squared	0.837845	S.D. dependent var	0.364105
S.E. of regression	0.146620	Akaike info criterion	-0.905036
Sum squared resid	0.752406	Schwarz criterion	-0.734414
Log likelihood	21.64820	F-statistic	66.44798
Durbin-Watson stat	2.363628	Prob(F-statistic)	0.000000

Annexure 3

SHORT RUN

Dependent Variable: D(LTX)
Method: Least Squares
Date: 02/28/11 Time: 00:43
Sample (adjusted): 1971 2008
Included observations: 38 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOPT)	0.464847	0.204943	2.268175	0.0298
D(LWYPC)	0.791327	2.854207	0.277249	0.7833
MRL	0.010365	0.093735	0.110582	0.9126
C	-0.014487	0.058963	-0.245702	0.8074

R-squared	0.140517	Mean dependent var	0.006746
Adjusted R-squared	0.064681	S.D. dependent var	0.226408
S.E. of regression	0.218964	Akaike info criterion	-0.100519

Sum squared resid	1.630137	Schwarz criterion	0.071859
Log likelihood	5.909860	F-statistic	1.852893
Durbin-Watson stat	2.964234	Prob(F-statistic)	0.156226

Annexure 4

Regression adding some lags

Dependent Variable: D(LTX)
Method: Least Squares
Date: 02/28/11 Time: 00:55
Sample (adjusted): 1972 2008
Included observations: 37 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOPT)	0.276542	0.152344	1.815243	0.0792
D(LWYPC)	0.930460	2.019591	0.460717	0.6482
D(LTX(-1))	-0.565894	0.127458	-4.439853	0.0001
D(LOPT(-1))	0.849154	0.155071	5.475919	0.0000
MRL	0.007737	0.066502	0.116347	0.9081
C	-0.012735	0.041654	-0.305723	0.7619

R-squared	0.611886	Mean dependent var	0.011150
Adjusted R-squared	0.549287	S.D. dependent var	0.227876
S.E. of regression	0.152985	Akaike info criterion	-0.769563
Sum squared resid	0.725535	Schwarz criterion	-0.508333
Log likelihood	20.23691	F-statistic	9.774676
Durbin-Watson stat	2.461989	Prob(F-statistic)	0.000011

EMPOWERMENT OF RURAL WOMEN, DECENT EMPLOYMENT AND MICRO ENTERPRISE DEVELOPMENT PROGRAMS OF NGOS IN BANGLADESH

Amir M. Nasrullah
Assistant Professor, Department of Public Administration, University of Chittagong, Bangladesh
E-mail: nasrullahctg@yahoo.com

Keith Dickson
Professor, Brunel Business School, Brunel University West London, Uxbridge, United Kingdom

Abstract: This paper considers the role of micro enterprise development programs (MEDPs) as a means of encouraging self-employment amongst poor rural women in Bangladesh in an attempt to widen their opportunities for 'decent employment'. Central to this endeavour are not only the candidates for such support but also the intermediary agencies - in this case, local non-governmental organisations (NGOs) - that organize the programmes and administer the funds. Also the key concept of 'decent employment', first articulated by the International Labour Office (ILO), is examined in the light of survey responses from both these groups of stakeholders.Survey findings indicate very positive effects of the various MEDPs on the female respondents, including increased personal income and skills levels, creation of sustainable self-employment activities, increased family benefits such as living standards and education, and very high repayment levels. What also become clear are higher levels of empowerment and self-confidence amongst the female participants as well as increased awareness of decent employment opportunities and their wider benefits.

INTRODUCTION

The empowerment of women is an essential precondition for the elimination of world poverty and the upholding of human rights (DFID, 2000). In particular it helps, at the individual level, to build a base for social change. It is widely realized that proper skills development training and other technical and financial support can empower rural poor women, a goal that contributes to eradicating poverty while reducing gender discrimination and child labour (Nasrullah 2008).

In Bangladesh, women constitute about half of the total population of which 80 percent live in rural areas (BBS, 2001). But their status has been ranked the lowest in the world on the basis of twenty indicators related to health, marriage, children, education, employment and social equality (NCBP, 2000). It is a well established fact that in a patriarchal society like Bangladesh, women are ascribed a lower status than men who have the sovereign power to control households and society as a whole, while women are often secluded in their homes (Balk, 1997). The World Bank study in Bangladesh highlights that women have limited roles in household decision-making, limited access and control over household resources (physical and financial assets), low levels of individual assets, heavy domestic workloads, restricted mobility and inadequate skills that all lead to increased women's vulnerability (Sebstad and Cohen, 2002).

Besides all this, in the present globalized economy, various types of inequalities within nations are increasingly evident and alarming. Income security remains at the forefront of challenges in the developing countries. Even in some middle-income countries, unequal distribution of income leaves many workers and their families extremely poor. Extreme poverty undermines their participation in community affairs and their voice in political and democratic institutions and processes. To meet these challenges and problems of the developing countries, International Labor Organization (ILO) initiated the Decent Work Agenda in the late 90's. The major goal of its declaration was to promote social justice through decent work for all men and women in the world - work to be carried out under the conditions of freedom, equity, security and human dignity. In

Bangladesh to meet the above challenges, a host of NGOs are working to empower the rural poor via decent employment generation through the application of MEDPs (Nasrullah, 2008).

SCOPE AND METHODOLOGY[21]

This paper considers the role of MEDPs as a means of generating self employment for rural poor women in Bangladesh, which in turn enhances their empowerment. Central to these endeavors are not only the candidates but also the intermediary agencies – in this case, local non-governmental organizations (NGOs) – that administer funds and operate the programmes. More specifically, this paper examines the condition of employment opportunities created by the NGO's via decent employment, skills development, training and awareness building activities of the NGO's, and the resulting level of empowerment of rural poor women in Bangladesh.

In Bangladesh a host of NGOs are working for decent employment generation for the rural poor women using MEDPs. Four NGOs in the Chittagong region of Bangladesh were surveyed. These were: - Young Power in Social Action (YPSA), Integrated Development Foundation (IDF), Banaful Social Welfare Organization (BSWO), and Programme for Helpless and Lagged Societies (PHALS). All four organizations reported successful implementation and administration of their respective MEDPs.

The study was basically conducted through a questionnaire-based survey method. For collecting primary data ten programme managers of the selected NGOs, and thirty five female participants engaged in MEDP of the sample NGOs were interviewed. Interviews took place in 2006-2007. For the respondents, simple questions in their own language were developed to elicit data on the major themes discussed above. For analysis, simple statistical tools were used, for example frequency tables, followed by explanation and discussion of implications. Though the study covered only a small part of Bangladesh in terms of respondents from both groups, the observations in this study are considered to be representative for the whole of Bangladesh.

KEY CONCEPTS

The key concepts of this study are defined and discussed below.

Women's Empowerment

Empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Empowered people thus have freedom of choice and action. This in turn enables them to better influence the course of their lives and the decisions that affect them. Empowerment is about change, choice, and power. It is a process of change by which individuals or groups with little or no power gain the power and ability to make choices that affect their lives (Kabeer, 2000).

In order for a woman to be empowered, she needs access to the material, human, and social resources necessary to make strategic choices in her life. Not only have women been historically disadvantaged in access to material resources like credit, property, and money, but they have also been excluded from social resources like education or insider knowledge of some businesses. Access to resources alone does not automatically translate into empowerment or equality, however, because women must also have the ability to use the resources to meet their goals. In order for resources to empower women, they must be able to use them for a purpose that they choose.

Naila Kabeer (2001) uses the term agency to describe the processes of decision making, negotiation, and manipulation required for women to use resources effectively. Women who have been excluded from decision making for most of their lives often lack this sense of agency that

[21] For a more detailed account of the study refer to Nasrullah, 2008.

allows them to define goals and act effectively to achieve them. However, these goals also can be heavily influenced by the values of the society in which women live and so may sometimes replicate rather than challenge the structures of injustice. According to UNIFEM, "gaining the ability to generate choices and exercise bargaining power," "developing a sense of self-worth, a belief in one's ability to secure desired changes, and the right to control one's life" are important elements of women's empowerment [UNIFEM 2000].

Three important dimensions of women's empowerment have been articulated (Malhotra et al., 2002). These dimensions are dynamic, interlinked and mutually reinforcing at household level and recognise the fact that the level of gender equality and development are directly proportional (Parveen and Leonhäuser 2004).

- **Socio-Economic Dimension** includes economic contribution to household welfare, access to socio-economic resources and ownership of productive and non-productive assets. This will increase women's earning capacity, bargaining power, control over resources, role in household economic decision-making, meeting the basic needs and altogether improving self-reliance, thereby reducing women's economic subordination.
- **Familial Dimension** includes participation in household decisions covering six major dimensions. The increased role in household decision-making would enable them to improve their self-determination, bargaining power, control over resources, self-esteem, autonomy, status and power relations within households. That means the increased role of women in household decision-making will lead to their own well-being and that of their children.
- **Psychological Dimension** includes perception on gender awareness with regard to basic rights of women and coping capacity to different household shocks. It will enhance self-confidence, bargaining power, freedom of choices and coping abilities within the households.

It is hypothesized that various kinds of inputs such as education and skill development training provided by different intervening agencies will encourage women's participation in the MEDPs. Subsequently, this process will lead to gender equality through enhanced self-confidence, better access to resources, freedom of choices and improved power relations. It is assumed that gender equality contributes substantially to the well-being of women and reduces women's vulnerability and poverty.

Parveen and Leonhäuser (2004) noted six important indicators of women's empowerment. These are as follows:

- **Contribution to household income**: that is the female's contribution in terms of per cent involvement in subsistence productive activities that are rewarded in cash or kind to household income.
- **Access to household resources:** the right, scope, power or permission to use and/or get benefits from household resources – eg, equal consumption of nutritious food, handling and spending money, selling of minor agricultural products, inter-personal communications, etc.
- **Ownership of individual assets:** the ability of a woman to control her own current assets and enjoy the benefits accruing from them.
- **Participation in household decision-making:** the extent of women's ability to participate in formulating and executing decisions regarding domestic, financial, child-welfare, reproductive health, farming and socio-political matters in coordination with other family members.

- **Perception on gender awareness:** Woman's ability to express her opinion with regard to existing gender inequality and discrimination against women.
- **Coping capacity to household shocks:** Women's ability to face sudden risks, crises and periodic stresses (threats to life or happiness) in the household.

Decent Employment

Decent employment refers to opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity. According to ILO, decent employment involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men (ILO, 2009). In essence, decent employment is about human dignity, about values, which transport the truth that free markets are there to serve people and not the other way around. It is about both core labour standards and human development (Nasrullah 2008).

The ILO claims, decent employment ensures the following benefits: - opportunities for work; work in conditions of freedom; productive work; equity in work; security at work; and dignity at work (ILO, 2009). The ILO further suggest a set of twenty nine indicators covering employment; earnings; hours worked; security of work; fair treatment in employment; safe work environment; social protection; social dialogue; and workplace relations and unacceptable work such as child labor for the decent employment agenda. Gender is addressed in each of these indicators by observing differences between women and men (Mujeri, 2004).

Micro Enterprise Development and Poverty Reduction

There is no universal definition of micro enterprises, but there are some agreements regarding their general characteristics within developing countries. These are: very small scale of operation, low levels of capital, technology and employment (generally less than 10), poor access to finance and low managerial capacity.

In many developing countries, micro enterprises are often subsumed under the small and medium-enterprise (SME) label, so accurate figures are not always available. Such is the case in Bangladesh. There are two criteria to define SMEs in Bangladesh: a) total investment made in terms of fixed assets; and b) the size of employment in terms of employment. Currently the Industrial Policy 2005 and SME Policy Strategy 2005 of Bangladesh classify small enterprises, i.e., micro enterprises, into two types: Manufacturing (on the basis of total investment) and Non-manufacturing (on the basis of employment size).

This study considers low levels of capital and employment as practical measures of micro enterprises. In terms of capital, micro enterprises are those with less than 0.5 million Bangladeshi Taka (approx £ 4,500). In terms of employment, micro enterprises are those with less than 10 full-time employees. Examples of both types in Bangladesh, manufacturing and non-manufacturing, include poultry and cattle rearing; vegetable and fruit gardening; handloom production; mushroom cultivation; grocery and other retail shops; various cottage industries; restaurants; sanitary items production; nurseries; handicrafts; tailoring; fisheries; local transportation, etc.

Micro enterprise development constitutes a blend of efforts to develop entrepreneurship. These efforts are to develop enterprises at the grassroots level with available raw materials, small capital and indigenous labor-intensive technology to ensure equity participation in employment and proper utilization of local human resources. Micro enterprise development is a pragmatic mechanism to expand employment, productivity and access to inputs, amenities and investment oppor-

tunities. The primary objective is to banish extreme poverty in the countryside and generate decent employment.

Development theorists, planners, and policy makers have experimented extensively with poverty reduction strategies for several decades to arrive at a consensus on the elements of such strategies. The World Bank's recent world development report 2000/2001, *Attacking Poverty,* provides an example of a consensus view that identifies poverty as the consequence of lack of access to resources that consists of human assets, natural assets, physical assets, financial assets and social assets. The implication is that improved access to these assets helps overcome poverty. All these assets are part of an integrated approach to poverty reduction. They help overcome poverty by increasing employment and its productivity and rewards. They enlarge basic human freedom and expand human capabilities, which can be ensured by promoting generation of decent employment. Thus decent work is a central effort to reduce poverty and an instrument to achieve equitable, inclusive and sustainable development (World Bank, 2000/2001).

Access to land, physical and financial assets help the poor overcome poverty not by entitling them to rent or annuity but by enabling them to employ themselves more effectively and productively. Basic rights, social security both formal and informal, including social capital, and social institutions all help to address poverty. While countries with higher incomes and greater resources are often able to set up systems of social security that are paid by the state or are part of the system of wage employment, this is seldom feasible in developing countries. It is in this sense that access to decent employment is a way out of poverty for the rural masses in countries like Bangladesh. Thus micro enterprise development is an appropriate mechanism in this regard (Nasrullah 2008).

According to Somavia (2000), working in conditions of poverty cannot be considered to be decent work. In the context of developing countries the focus should be the full and productive employment of labor forces that provides all members of the labor force with sufficient income to pull them and their dependents out of poverty. High and increasing productivity of employment commensurate with increasing income is an important attribute of decent employment. For successful poverty alleviation through the provision of decent work, it is essential for the increase in employment to be introduced by growth in output. This is just another way of saying that employment must be productive in order to be an effective tool for poverty reduction. Employment enables the poor to increase their welfare because it creates for them an entitlement to income that is paid out of the increment in output due to employment.

Decent employment certainly aids the empowerment of rural women, because the attainment of the objectives of decent employment leads to the achievement of the aims of women's empowerment. A successful MEDP ensures greater self employment for women, as well as employment for others, increases in wage employment, productivity and rights at work, while also enhancing dignity and living standards. As these are the welfare indicators of the poor sections of the society, it may be said that MEDP can reduce poverty by generating decent employment for the poor masses of the least advanced societies and ensured their empowerment (Nasrullah 2008).

MAJOR FINDINGS AND GENERAL OBSERVATIONS

Profile of Female Respondents

The researcher interviewed 35 female participants in MEDPs, administered by the four NGOs around the Chittigong region. All bar one of the 35 were married women. The age profile, educational status, family circumstances and work experience of the respondents are shown below.

Table 1: Age Profile of the Respondents

Age	20-30 yrs	30-40 yrs	40+ yrs	Total
No.	7	18	10	35

Source: Field Survey, 2007

Table 2: Educational Qualifications of the Respondents

	Illit-erate	Can Sign Name Only	Below Class X	Sec. School Cert.	Higher School Cert	To-tal
No.	1	16	14	4	0	35

Source: Field Survey, 2007

Table 3: Family Circumstances of Respondents

No. of Family Members	1 – 4	4 - 6	More than 6
No of Respondents	13	9	13
No. of Earning Members in the Family	Only 1	2	3 +
No of Respondents	7	20	8

Source: Field Survey, 2007

Table 4: Previous Professions of the Respondents

Previous Profession	No of Respondents
House wife	20
Maid Servant at Others House	10
Handicraft worker	5
Total	35

Source: Field Survey, 2007

Clearly the participants are from the poorer sections of Bangladeshi society, with limited education and socio-economic prospects. Many were (mostly unpaid) housewives prior to their engagement in MEDPs.

Respondents' Initial Perceptions of and Engagement with MEDP

Before engaging with MEDPs participants had few if any idea about such programmes. But once exposed to, or given training on, MEDP objectives and activities, they saw it as a great opportunity for generating decent employment and empowering the poor. From the diversity of enterprises developed via engagement with MEDPs (tabled below), the case for enhanced prospects and empowerment is strong.

Table 5: Types of the MEDP-funded Enterprises of Respondents

Types of Enterprises	No of Respondents
Retail (Shops, Restaurants)	7
Tailoring	7
Horticulture	5
Animal Husbandry	12
Handicraft Work (incl. textiles)	3
Transport	1
Total	**35**

Source: Field Survey, 2007

Their engagement came primarily from the efforts of the NGOs in convincing potential candidates to participate through training sessions and the ready availability of start-up funds. Some participants indicated the role of other members of their society, especially husbands and neighbors in helping to convince them to participate. More specialized training was also provided though take-up was much lower presumably because it related to specific types of proposed enterprise activity (though interestingly the number of participants on such sessions don't match those who eventually set up business in that activity!)

Table 6: Types of Training that the Respondents Received

Types of Training	No of Respondents
General Training about:	
Decent Employment	30
Entrepreneurship Development & Bus Management	30
Personal/Family Health	3
Specialized Training about:	
Domestic Animal Husbandry	9
Horticulture (Nursery, Veg. Gardening)	8
Tailoring (including Design)	12
Honey Cultivation	2

Source: Field Survey, 2007

Financial Aspects of Funding under MEDPs

The sample indicated very modest levels of loans, in absolute terms, despite a much higher allowable maximum (up to half million BDT[22]), but for over half the sample, this must be gauged against no previous income, so for both the participants and the funders there was significant risks attached. However the reward, judged by the surprisingly large difference between pre and post-MEDP incomes, is quite astounding so that it is pleasing to record that programme managers were delighted to reveal that the rate of loan recovery within the specified period was almost 98%.

Table 7: Loans to the participants under MEDP, n= 35

Loan Amount		No. of Participants
Up to BDT 25,000	(approx. £225)	24
BDT 25,000 to BDT 50,000	(approx. £225 -450)	10
BDT 50,000 to BDT 75,000	(approx. £450- 675)	1

Source: Field Survey, 2007

Table 8: Previous and Present Monthly Income of the Respondents, n=35

Annual Income	*None or <BDT18K*	BDT 18-6K (£160-320)	BDT 36-60K (£320-550)	BDT 60-120K (£550-1100)	BDT 120-180K (£1100-1600)
Pre-MEDP	21	14	0	0	0
Post-MEDP	0	0	9	18	8

Source: Field Survey, 2007

[22] One hundred Bangladeshi Taka, BDT, is approximately worth £0.90 (2009 fig).

Respondent's Post-engagement Perceptions of MEDPs

The respondents indicated that their progress gained significant momentum in areas other than income. All the respondents said that their self-employment was ensured, as well as they became capable of employing others in their enterprises. Their skills, empowerment, social awareness, knowledge of rights, dignity, decision making capacity etc. are said to be enhanced due to the training and experiences they have undergone after engaging in the MEDP. The following table indicates the personal progress claimed.

Table 9: Progresses in Various Areas: Participants' View

Areas of Progress	No of Respondents
a. After engaging in the MEDP, self-employment is ensured.	35
b. After engaging in the MEDP, employment opportunities for others have been also created in this enterprise.	25
c. Enhanced efficiency and skills after getting training.	35
d. Ensured empowerment	35
e. Able to bear the educational expenses of other family members	19
f. Living standard is enhanced	35
g. Social awareness is built	25

Source: Field Survey, 2007

In terms of poverty reduction, all participants experienced some positive effect with the majority noting a major impact, but a small minority claimed a low impact. This may relate to their previous income level being higher than average or even their choice of star-up venture being relatively less profitable than others.

Table 10: Percentage of reduction of poverty: Participants' View

Poverty Reduction, %	**No of Respondents**
20-40%	5
40-60%	10
60-80%	17
80-100%	3
Total	**35**

Source: Field Survey, 2007

Decent Employment: Participants and MEDP Managers' Views

When asked to rate the level of 'decency' of their new employment (in terms relating to the discussion earlier about decent employment) the majority were positive, though the researcher noted the impression of a general indifference to this particular line of questioning. A significant proportion of participants were not entirely satisfied, though it appears that this has more to do with their doubts whether their enterprises will survive beyond the funding period, so that they believe they will always be dependent on MEDP funding, hence their less than wholesome satisfaction.

In response to a similar question, seven of the 10 programme managers were very positive about the level of decent employment generated through MEDPs. It is expected that they would be more positive, but the fact that 3 of them were still critical of some aspects of the employment created indicates that there is still room for improvement in this regard.

Table 11: Level of Decency of Generated Employment

Level of decency / Adequacy		No of Respondents	No of MEDP Mgrs
20-40%	Very Dissatisfied	3	0
40-60%	Dissatisfied	5	1

60-80%	Satisfied	12	2
80-100%	Very Satisfied	15	7
Total		35	10

Source: Field Survey, 2007

Empowerment: Participants and MEDP Managers' Views

When asked to rate the resulting empowerment (in terms relating to the earlier discussion) arising from their engagement with MEDPs, the majority (30 out of 35) of participants were very positive. However, five were not so positive and on further probing, it was apparent that their male partners dominated on any business decision, so restricting the participants' role. The programme managers were even more positive (9 out of 10), for obvious programmatic reasons but also perhaps because they did not experienced the domination first-hand and, being male themselves, were more accepting of a patriarchal society.

Table 12: Level of Empowerment of the Stakeholders

Level of empowerment		No of Respondents	No of MEDP Mgrs
40-60%	Dissatisfied	0	0
60-80%	Satisfied	5	1
80-100%	Very Satisfied	30	9
Total		35	10

Source: Field Survey, 2007

MAJOR FINDINGS

There are huge numbers of people living in disadvantaged societies who are unemployed or underemployed and fighting poverty. Not just in Bangladesh but in other developing economies also, MEDPs are gaining in popularity to address this situation, from both the individual participants and from institutional bodies concerned with poverty alleviation and economic development in these countries.

Interestingly, though the females are the formal participants, their male partners appeared to be mostly running their enterprises, a reflection of the still entrenched patriarchal nature of their society. The practical problem is that the male partners of the female participants are not themselves members of the NGO group (and therefore are not eligible for loans), and as a consequence they do not receive any kind of training from the NGOs. Nevertheless they are the key persons of the enterprises and continue to dominate the activity. The enterprises that the participants developed are mostly traditional, for example, retail outlets, tailoring, animal husbandry, vegetable gardening, etc., and very few were innovative, like mushroom production that might help to diversify the local economy.

Though the NGOs emphasize, even stipulate, various types of training, few female participants appeared enthusiastic on this score, a phenomenon not unrelated to the previous paragraph. It was seemed to the researcher that the females were engaged with this MEDP just to get loans. Nor did they appear enthusiastic or have strong views about decent employment or empowerment. More worryingly, few participants thought their enterprises are so strongly established that it will be sustained forever even after the closure of the MEDP.

The income of the participants has increased to a level by which they can lead a better life. Engagement into these programmes has not only increased their income, but also benefited them via enhanced levels of empowerment, decision-making capability, social awareness, knowing about human rights, knowing about rights at work, and also they are generating employment for others in their enterprises. The pattern of their life styles is being changed. Social status of the participants has increased. Where previously they didn't have any position in society they now

receive greater respect from other in their community are more invitations to local social events. The participants have become more conscious about their children's education and future so they are sending their children to school.

CONCLUSION

Employment generation is an essential instrument for raising living standards and widening access to income and social protection. In recent decades, many Asian countries have successfully created jobs and reduced poverty. Despite making significant progress in economic and social development since independence, Bangladesh has still a long way to go in reducing socio economic deprivation and ensure a better life for the vast majority of its population. The creation of sufficient employment to absorb the growing labour force is a key challenge. MEDPs have proved to be an important tool for employment generation. Obviously better access to employment can have a sustainable impact on poverty when it is accompanied by rising productivity and real wages; wider opportunities for women, youth and other disadvantaged groups. Above all, if MEDPs are successful in expanding productive and remunerative employment that also satisfies labour rights such as right to work, health and safety, social protection and social dialogue in an integrated manner, then decent employment and greater social empowerment will be ensured (Nasrullah 2008).

From the above findings of the study it can be concluded that, on the basis of the main objectives of women's empowerment and decent employment discussed above, the MEDP is a successful tool for decent employment generation and for empowering the rural poor women of Bangladesh. Though the study covered only a small portion of Bangladesh, the observations may be considered more or less representative of the whole country. Proper monitoring by government and the international funding agencies should be also present to guide the NGOs in continuing their valuable work.

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TEACHERS' JOB SATISFACTION AND JOB PERFORMANCE IN SECONDARY SCHOOLS IN EKITI STATE, NIGERIA

T.O.Adeyemi
Department of Educational Foundations & Management, University of Ado-Ekiti, Ado-Ekiti, Nigeria
E-mail: toadel957@yahoo.com

Abstract: This study investigated the relationship between teachers' job satisfaction and teachers' job performance in Secondary Schools in Ekiti State, Nigeria. The study population comprised all the 340 secondary schools in the State. This was made up of 170 junior and 170 senior secondary schools. Out of the 14,780 teachers in the schools, (8,200 in junior secondary and 6,580 in senior secondary), 6,400 teachers (3,780 in junior secondary and 2,620 in senior secondary) were sampled for the study. The method of selection was by stratified random sampling technique. The instrument used for the study was a questionnaire. While the data collected were analyzed using frequency counts, percentages, Pearson Product Moment Correlation, z-test, Correlation Matrix, Analysis of Variance and Multiple Regression. It was found that teachers' job satisfaction was at a moderate level in the schools. Teachers' job performance was also at a moderate level. There was a significant relationship between teachers' job satisfaction and teachers' job performance in the schools. Although teachers' job satisfaction was almost the same in all the schools, teachers' job performance was at a higher level in senior secondary schools than in junior secondary schools. It was recommended that the State government should provide better welfare services for teachers in other to enhance their productivity. The conditions of service of teachers should be improved to enable them rise to the highest peak in the public service. Suitable office accommodation should be provided for teachers in other to enhance a high level of job performance in the schools.

INTRODUCTION

The term 'satisfaction' poses some problems of definition. These problems have been centered on what satisfaction is all about. Some researchers (Gazioglu & Tansel, 2002; Adu 2003) considered satisfaction as the way by which an individual is contented with what he or she is doing. Other researchers (Akinwumiju, 1995; Robbins, 2001; Diaz-Serrano & Cabral Vieira, 2005) reported that satisfaction connote the way by which people react to their work. Thus in any organization, job satisfaction has always being a matter of interest to stake holders. However, teachers' job satisfaction in the school setting could be seen in the way by which all their demands are met. Since human wants are unlimited while resources are limited Adeyemi, (2006), it becomes difficult therefore to satisfy all the wants required by individuals. As such, there is need to make choices from scarce productive resources.

In supporting this view, Mullins (2005) argued that job satisfaction is more of an attitude to one's job. He however contended that job satisfaction is a complex and multifaceted concept which can mean different thing to different people. He asserted that job satisfaction is usually linked with motivation. This argument supported the findings made by Bolarinwa (2002) in a study on motivation and teachers' job performance in Lokoja Local Government Area of Kogi State, Nigeria where he reported that motivation is a necessary ingredient in effective job performance.

The argument also supported the findings made by Robbins (2001) which indicated that job satisfaction is an individual's general attitude towards his or her job. In the same vein, Riggio, (2000) argued that job satisfaction connotes the feelings and attitude one has about one's job. He also argued that all aspects of a particular job, good and bad, positive and negative are likely to contribute to the development of feelings of satisfaction or dissatisfaction.

Souza-poza & Souza-poza(2000) held a contrary view from those of other researchers. They argued that job satisfaction is more than feelings and attitude towards job. They further argued that job satisfaction depends on the balance between work-role inputs (working time) and work –

role outputs (pleasure). They however contended that with an increase in the relative work –role inputs, job satisfaction tends to reduce. In a related study, Peretomode, (2006) conducted a research on the relationship between length of working career and job satisfaction and found that workers who spent more years in the service have significantly job satisfaction than those who spent less number of years. This finding was at variance with the findings made by Oshagbemi (2000) who reported that among university instructors in United Kingdom, employment tenure does not correlate with job satisfaction.

In Ekiti State, Nigeria, teachers' demands include an improved condition of service, increment in salary, better welfare services such as housing schemes for teachers, car loan, better class room environment and regular promotion (Ajayi, 2005). In a bid to satisfying these demands by government, teachers are expected to perform their duties effectively.

Job performance refers to what a person does in an organization (Akinwumiju, 1995). It also refers to the behaviours or actions of individuals in doing certain duties that are relevant to the goals of the organization (McClay, Campbell & Cudeck 1994). Supporting these views, McShane & Glinow (2005) were of the opinion that job performance is goal directed behaviours under the individual's control that support organizational objectives. Hughas, Ginnelt & Curphy (2009), shared the same view that job performance concerns those behaviours directed toward the organization's goal or the products and services resulting from those behaviours. They argued that in the work place, we can choose to perform a wide variety of behaviours, but job performance would only include those behaviours related to the production of goods or services.

Thus Teacher job performance refers to the actions of the teacher in performing certain jobs or duties in the school system. It is the totality of the input of the teacher towards the attainment of educational objectives (Ajayi, 2005; Olorunsola, 2010). It is the act of accomplishing or executing a given task in a school organization (Adeyemi, 2008). It could be measured through the level of teacher's competency in subject matter, lesson note preparation, content covered, level of coverage of scheme of work, lesson presentation, punctuality at work, monitoring of pupils work, effective supervision, effective leadership, class control and the disciplinary ability of the teacher.

Considering these points, Mullins (2005) reported that job performance depends upon the perceived expectation regarding efforts expected and achieving the desired outcome. In the same vein, Campbell (1999) asserted that the most obvious category of individual behaviours in the workplace are those that support the organization's objectives. This argument supported the findings made by Olaniyan (1997) that the performance of an individual at work in an organization is a function of certain characteristics of the individual, including his knowledge, skills, motivation, attitude and certain aspect of the environmental situations such as the nature of the job, the reward associated with his performance and the leadership provided for him. The deduction from the above assertion is that when workers are well motivated, the drive and determination to put in their best and see that success is achieved is most expected.

The importance of job performance in every organization can not be over-emphasized (Obi 2004). It involves the utilization of all available resources, most especially, the human resource. Beehr (1996) also shared the same view with Obi that there are three psychological states that are critically important for people to receive good accomplishment for performing their job well. According to him, the person must experience the work as meaningful. The person must feel responsible for the job performance. The person must have a reason to believe that he or she did perform successfully. Supporting this view, Chandon (2000) argued that job performance involves the interaction among three types of resources namely physical, financial and human.

Thus, Gazioglu & Tansel, (2002) described job performance as the extent to which a person does the task assigned to him. This argument was supported by Adu (2003) who regarded job performance as a technical term which connotes the extent to which an individual discharges his lawful duties. In the school system, therefore, teacher job performance is the measure of the degree of effective coverage of the expected content of the curriculum by the teacher (Adebola, 1998). It is thus a function of how the content of the school's work is effectively accomplished. In view of the foregoing, this study intended to examine the relationship between teachers' job satisfaction and teachers' job performance in secondary schools in Ekiti State, Nigeria in order to correct erroneous impressions.

THE PROBLEM

The level of the dissatisfaction among teachers in Nigerian secondary schools as being a matter of concern to many educationists (Nwadiani, 1998; Aghenta, 2000). The dissatisfaction was centered on the way many teachers show certain behaviours in their job performance. While some teachers seem to show lackadaisical attitude to their work, others seem to show much interest in their workplace. The issue of how satisfied teachers are in relation to their job performance in secondary schools in Ekiti State, Nigeria constituted the problem which this study intended to examined. In addressing this problem, the following questions were raised.

1. What is the level of job satisfaction among teachers in secondary schools in Ekiti State, Nigeria?
2. What is the level of teachers' job performance in secondary schools in the State?
3. Is there any significant relationship between teachers job satisfaction and teachers job performance in secondary schools in Ekiti State, Nigeria?
4. None of the variables of teachers' job satisfaction best predict teachers' job performance in secondary schools in Ekiti State, Nigeria?
5. Is there any significant difference in teacher job satisfaction in junior and senior secondary schools in Ekiti State, Nigeria?
6. Is there any significant difference in teachers' job performance in junior and senior secondary schools in the State?

METHOD

This study adopted a correlational research design of the survey type. A correlational survey involves the collection of data over a large area in order to determine whether and to what degree, a relationship exists between two or more quantifiable variables (Anderson, 1998). The study population comprised all the 340 secondary schools in the State. This population was made up of 170 junior secondary and 170 senior secondary schools. Out of the 14,780 teachers in the schools, (8,200 in junior secondary and 6,580 in senior secondary), 6,400 teachers (3,780 in junior secondary and 2,620 in senior secondary) were sampled for the study. The method of selection was by stratified random sampling technique. The instrument used for the study was a questionnaire titled "teachers' job satisfaction and job performance questionnaire". The questionnaire was in two parts. Part 1 was demographic. It sorts information on personal data about the schools and the teachers. Part 2 was in three sections. Section A elicits information on teachers' job satisfaction. Section B sorts information on teachers' job performance in the schools. Section C elicited information on the relationship between teachers job satisfaction and teachers job performance in the schools. In determining the content validity of the instrument, the questionnaires

were given to expert in educational management who examined each item of the questionnaire and matched them with the research questions. To ascertain whether the instrument actually measured what they are supposed to measure. Their observations were used in effecting necessary corrections to the instruments before they were administered to the respondents. In determining the reliability of the instruments, test-retest reliability technique was used. The questionnaires were administered to 50 respondents outside the study area. After a period of two weeks, the questionnaires were re-administered to the same respondents. The data collected on the two tests were analyze using Pearson Product Moment Correlation. A correlation coefficient of 0.85 was obtained indicating that the instruments were reliable for the study.

The instruments were administered to the respondents through the use of research assistance. After a period of two weeks, the completed instruments were retrieved from the respondents. Out of the 6,400 of the questionnaires administered, returns were received from 5,320 respondents (83.1%). Out of this figure, returns from 860 respondents were badly completed and discarded. Returns from the remaining 4,460 respondents were duly completed and used for the study. The data collected were analyzed using descriptive statistics such as frequency counts and percentages as well as inferential statistics such as Pearson Product Moment Correlation, z-test, Correlation Matrix, One-way Analysis of Variance and Multiple Regression. The non-hypothesis was tested for significance at 0.05 alpha level.

RESULT

Question 1: What is the level of job satisfaction among teachers in secondary schools in Ekiti State, Nigeria?

In answering this question, data on the level of job satisfaction among teachers in secondary schools in Ekiti State, Nigeria were collected from responses of the respondents to items on job satisfaction in the questionnaire. The variables of job satisfaction among teachers in the school that were examined included condition of service, prompt payment of salaries, prompt payment of allowances such as leave bonus and payment of fringe benefits to teachers. Others included provision of staff welfare services and suitable office accommodation. The data collected were collated and analyzed using frequency counts and percentages. The findings are presented in table 1.

As indicated in table 1, the level of job satisfaction among teachers in secondary schools in Ekiti State, Nigeria was on the average. The findings on each of the variables examined showed that teachers were moderately satisfied with their job. It needs to be mentioned however that the provision of suitable office accommodation has the lowest level of response. 2526 respondents (61.59%) claimed that the provision of suitable office accommodation for teachers' in all the schools was at a low level. Although the response rate on each of the variables of teachers' job satisfaction were at different levels, on the average job satisfaction among teachers of secondary schools in the State was at a moderate level.

Question 2: What is the level of teachers' job performance in secondary schools in the State?

In answering this question, data on job performance among teachers of secondary schools in Ekiti State, Nigeria were collected from the responses of the respondents to items on teachers' job performance in the questionnaire. The variables of teachers' job performance examined included teachers competence, preparation of scheme of work, lesson note preparation, content of lesson note, lesson presentation, use of teaching materials, method of teaching and effective teaching. Others included effective supervision, monitoring pupils' work,

Table 1: Job Satisfaction Among Teachers of Secondary Schools in Ekiti State, Nigeria

Variables	N	High	%	Mod-erate	%	Low	%
Conditions of Service	4460	410	9.2	2800	62.8	1250	28.0
Prompt Payment of Salaries	4460	56	1.2	3219	72.2	1185	26.6
Prompt Payment of Allow-ances such as Leave Bonus	4460	42	1.0	2982	66.8	1436	32.2
Payment of Fringe Benefits to Teachers	4460	82	1.8	2694	60.4	1684	37.8
Provision of Staff Welfare Services	4460	864	19.4	2176	48.8	1420	31.8
Suitable Office Accommo-dation	4460	563	12.6	1287	28.9	2610	58.5
Average Total	4460	336	7.53	2526	61.59	1598	30.88

Table 2: Job Performance among Teachers of Secondary Schools in Ekiti State, Nigeria

Variables	N	High	%	Mod-erate	%	Low	%
Teachers Competence	4460	1540	34.5	2130	47.8	790	17.7
Preparation of Scheme of Work	4460	871	19.5	2304	51.7	1285	28.8
Lesson Note Preparation	4460	2420	54.3	1530	34.3	510	11.4
Contents of Lesson Note	4460	486	10.9	2562	57.4	1412	31.7
Lesson Presentation	4460	1850	41.5	2172	48.7	438	9.8
Use of Teaching Materials	4460	900	20.2	1520	34.1	2040	45.7
Method of Teaching	4460	710	15.9	1940	43.5	1810	40.6
Effective Supervision	4460	990	22.2	1780	39.9	1690	37.9
Monitoring Pupils Work	4460	815	18.3	1865	41.8	1780	39.9
Class Control	4460	1016	22.8	1750	39.2	1694	38.0
Evaluation of Teaching	4460	833	18.7	1871	42.0	1756	39.3
Loyalty	4460	800	18.0	1920	43.0	1740	39.0
Integrity	4460	860	19.3	1875	42.0	1725	38.7
Human Relationship	4460	1780	39.9	1792	40.2	888	19.9
Motivation	4460	774	17.4	1936	43.4	1750	39.2
Participation in School Sports	4460	1048	23.5	1740	39.0	1672	37.5
Participation in School Activities	4460	820	18.4	1860	41.7	1780	39.9
Disciplinary Ability	4460	850	19.1	1890	42.4	1720	38.5
Average Total	4460	1076	24.13	1913	42.89	1471	32.98

class control, evaluation of teaching, loyalty, integrity, human relationship, motivation, participation in school sport's, participation in school activities and disciplinary ability. The data collected were collated and analyzed with the use of frequency counts and percentages. Table 2 shows the findings.

In table 2, the level of teacher job performance was found to be moderate. Out of the 4460 respondents 1913 (42.89%) reported that teacher job performance on the average was at a moderate level. Although 2420 respondents (54.3%) claimed that lesson note preparation among the teachers was at a high level. 2562 respondents (57.4%) reported that the contents of lesson note were moderate while 2304 respondents (51.7%) indicated that the preparation of scheme of work

was at a moderate level. On the average, responses to all the variables of teacher job performance showed that teacher job performance was at a moderate level in the schools.

Question 3: Is there any significant relationship between teachers job satisfaction and teachers job performance in secondary schools in Ekiti State, Nigeria?

In answering this question, the following hypothesis was raised.

Ho: There is no significant relationship between teachers job satisfaction and teachers job performance in secondary schools in Ekiti State, Nigeria.

Testing this hypothesis, data on the responses of the respondents to items on teachers' job satisfaction and teachers' job performance in the sample schools were collected through their responses to the items in the questionnaires.

The data collected were collated and analyzed using frequency counts. While the hypothesis was tested with the use of Pearson Product Moment Correlation

The findings are presented in table 3.

Table 3: Relationship between Teachers Job Satisfaction and Teachers Job Performance in Secondary Schools in Ekiti State, Nigeria

Variables	N	Df	r calculated	R table
Teachers' Job Satisfaction	4460	4458	0.421	0.195
Teachers' Job Performance	4460			

$p < 0.05$

As indicated in table 3, the r calculated (0.421) was greater than the r table (0.195) at 0.05 level of significance. Hence, the null-hypothesis was rejected. This shows that there was a significant relationship between teacher job satisfaction and teacher job performance in secondary school in Ekiti State, Nigeria. The correlation coefficient of 0.421 was high indicating significant relationship between the two variables. The finding suggests that the higher the level of job satisfaction among the teachers', the higher the level of teachers job performance in the schools.

Question 4: None of the variables of teachers' job satisfaction best predict teachers' job performance in secondary schools in Ekiti State, Nigeria?

In answering this question, data on the variables were collected from the responses of the respondents to items in the questionnaire. The predictor variables were namely conditions of service, prompt payment of teachers' salaries, prompt payment of teachers' allowances, prompt payment of fringe benefits, provision of welfare services for teachers' and provision of suitable office accommodation. The criterion variable was teachers' job performance. Since one of the first steps in computing a regression equation with several variables is to calculate a correlation matrix for all the variables (Norusis/SPSS Inc., 1993), correlation analysis was carried out and a correlation matrix was derived showing the coefficient of correlation for each pair of variables examined. The findings of the correlation matrix are shown in Table 4.1

Table 4.1: Correlation Matrix on Teachers' Job Satisfaction and Teachers' Job Performance in Secondary Schools in Ekiti State, Nigeria

Variables	Teachers' Job Performance	Teachers' Condition of Service	Prompt Payment of Teachers' Salaries	Prompt Payment of Teachers' Allowances	Payment of Fringe Benefits to Teachers	Provision of Staff Welfare Services	Suitable Office Accommodation
Teachers' Job Performance	1.00						
Condition of Service	0.39	1.00					
Prompt Payment of Teachers' Salaries	0.47	0.42	1.00				
Prompt Payment of Teachers' Allowances	0.45	0.36	0.38	1.00			
Payment of Fringe Benefits to Teachers	0.35	0.31	0.34	0.32	1.00		
Provision of Staff Welfare Services	0.34	0.32	0.29	0.31	0.27	1.00	
Suitable Office Accommodation	0.14	0.12	0.11	0.12	0.14	0.09	1.00

$P<0.05$

In Table 4.1, many of the predictor variables showed significant relationship with each other and with the criterion variable, teachers' job performance. The value of r shows the correlation coefficient between each pair of variables. As such, the value of r indicating correlation coefficients of 0.2 and above showed significant relationship between each pair of variables examined while the coefficients of r less than 0.195 for each pair of variables were not significant. In other to compute the f ratio for all the variables, A regression analysis of Variance (ANOVA). Table 4.2 shows the findings.

Table 4.2: Analysis of Variance

	Df	Sum of Squares	Mean Square	F	Sign. F
Regression	5	4.3192	1.0254	121.258	0.0002
Residual	4454	2.7256	0.1472		

As indicated in table 4.2, the Sum of Square (Regression) was 4.3192 while the Sum of Square (Residual) was 2.7256. The Mean Square (Regression) was 1.0254 while the Mean Square (Residual) was 0.1472. The F Ratio was 121.258 while the significant F was 0.0002. This shows a significant difference among the predictor variables and the criterion variable.

However, since the correlation analysis determines only the relationship between each pair of variables, it could not show the relationship among all the variables put together. Hence, the multiple regression analysis was carried out to determine the interrcorrelation among the variables and to establish which of the predictor variables could best predict the values of the criterion variable. The findings are presented in Table 4. 3.

Table 4.3: Regression Analysis on Predictor Variables of Teachers' Job Satisfaction and Criterion Variable (Teachers' Job Performance)

Predictor variables	B	SE B	Beta	T	Signif. T
Prompt Payment of Teachers' Salaries	0.47821	3.15216	0.42621	1.2153	0.0000
Prompt Payment of Teachers' Allowances	0.45342	0.01124	0.40743	1.1265	0.0000
Conditions of Service	0.40454	0.010315	0.38474	1.1274	0.0002
Payment of Fringe Benefits to Teachers	0.36854	0.010586	0.31412	0.1743	0.0004
Provision of Staff Welfare Services	0.34537	0.02471	0.20451	0.1258	0.0004
Suitable Office Accommodation	0.09342	0.00112	0.00327	0.0672	0.0600
(Constant)	3.01246	0.023142		100.472	0.0003

Table 4.3 shows the contributions of each of the predictor variables of teachers' job satisfaction to the regression model. The following regression equation was derived:

y = 3.01246 + 0.47821 (prompt payment of teachers' salaries) + 0.45342 (prompt payment of teachers' allowances) + 0.40454 (conditions of service) + 0.36854 (payment of fringe benefits to teachers) + 0.34537 (provision of staff welfare services) + 0.09342 (suitable office accommodation).

Multiple R = 0.54761

R Square = 0.53825

Adjusted R Square = 0.51624

Standard Error = 0.04271

This shows that the Multiple R was 0.54761, R Square was 0.53825, Adjusted R Square was 0.51624 while the Standard Error was 0.04271. The R^2 of 0.53825 shows that 53.8% of variation in teachers' job performance is accounted for by the variation in teachers' job satisfaction. The balance of 46.2% might have been accounted for by the variation in other variables that were not considered in this study**.** The adjusted R^2 of 0.51624 attempts to correct the R^2 in order to closely reflect the goodness of fit. It tends to show how well the data fit into the regression model. The adjusted R^2 0.51624 is thus the preferred measure of goodness of fit because it is not subject to the bias of the unadjusted R^2.

As indicated in table 4.3, many of the variables entered the regression equation. The best predictor of teachers' job performance in the school was the prompt payment of teachers' salaries which contributed 47.82% to the regression equation. The contributions of other predictor variables to the regression equation were as follows, prompt payment of teachers' allowances 45.34%; conditions of service 40.45%; payment of fringe benefits to teachers 36.85%; provision of staff welfare services 34.54% and suitable office accommodation 9.34%.

Question 5: Is there any significant difference in teacher job satisfaction in junior and senior secondary schools in the State?

In answering this question, the following hypothesis was postulated.

Ho: There is no significant difference in teachers' job satisfaction in junior and senior secondary schools in the State.

In testing this hypothesis, data on the responses of the respondents to items on teachers' job satisfaction in sampled junior and senior secondary schools in the State were collected through their responses to the items in the questionnaires.

The data collected were collated and analyzed using frequency counts while the hypothesis was tested with the use of z-test. The findings are presented in table 5.

Table 5: Z-test Output on Teachers' job Satisfaction in Junior and Senior Secondary Schools in Ekiti State, Nigeria

Variables	N	Mean	SD	Df	z calculated	z table
Junior Secondary	170	34.56	21.12	338	1.72	1.96
Senior Secondary	170	39.21	24.81			

$p > 0.05$

As indicated in table 5, the z calculated (1.72) was less than the z table (1.96) at 0.05 alpha level. Hence, the null-hypothesis was accepted. This shows that there was no significant difference in teachers' job satisfaction in junior and senior secondary schools in Ekiti State, Nigeria.

Question 6: Is there any significant difference in teachers' job performance in junior and senior secondary schools in the State?

Answering this question, the following hypothesis was postulated.

Ho: There is no significant difference in teachers' job performance in junior and senior secondary schools in the State.

Testing this hypothesis, data on the responses of the respondents to items on teachers' job performance in sampled junior and senior secondary schools in the State were collected through their responses to the items in the questionnaires.

The data collected were collated and analyzed using frequency counts while the hypothesis was tested with the use of z-test. The findings are presented in table 6.

Table 6: Z-test Output on Teachers' Job Performance in Junior and Senior Secondary Schools in Ekiti State, Nigeria

Variables	N	Mean	SD	df	z calculated	z table
Junior Secondary	170	25.42	20.79	338	3.51	1.96
Senior Secondary	170	54.81	28.45			

$p < 0.05$

In table 6, the z calculated (3.51) was greater than the z table (1.96) at 0.05 alpha level. As such, the null-hypothesis was rejected. This indicates that there was a significant difference in teachers' job performance in junior and senior secondary schools in Ekiti State, Nigeria. The mean value (54.81) was higher for senior secondary schools as against the lower mean value (25.42) for junior secondary schools. This suggests that teachers' in senior secondary schools out-performed teachers' in junior secondary schools in terms of job performance.

DISCUSSION

The foregoing shows the analysis of data collected for this study. In the analysis, it was found that teachers' job satisfaction in secondary schools in Ekiti State, Nigeria was at a moderate level. This might not have been unconnected with the fact that teachers' job satisfaction varies from school to school. This finding supported the findings made by earlier researchers (Adu 2003; Bolarinwa 2002). It was also found that teachers' job performance on the average was at a moderate level in all the schools. This shows that teachers in the schools were not performing at their best. This finding agreed with the findings of other researchers (Aghenta, 2000; Adeyemi, 2010).

The significant relationship found in this study between teachers' job satisfaction and teachers' job performance shows that there was a strong association between the two variables. This find-

ing was consistent with the findings made by (Gazioglu, & Tansel, 2002; Peretomode, 2006) who found significant relationship between job satisfaction and job performance in the work place.

The contributions of variables of teachers' job satisfaction examined in this study such as the prompt payment of teachers' salaries and the prompt payment of teachers' allowances to the regression equation confirm that teachers' job performance in secondary schools in Ekiti State, Nigeria was a function of teachers' job satisfaction. This finding suggests that the more regular teachers' salaries and allowances are paid the higher would be the level of their job performance. These findings were consistent with those of earlier researchers (Olaniyan, 1997; Peretomode, 2006). Nevertheless, the null significant difference found in teachers' job satisfaction in this study between junior and senior secondary schools in the State was an indication that the level of job satisfaction among teachers in the schools was almost the same. This finding negated the findings of other researchers (Adebola, 1998; Adeyemi, 2008). On the contrary, the significant difference found in teachers' job performance between junior and senior secondary schools in the State shows that teachers in senior secondary schools out-performed teachers in junior secondary schools in terms of job performance. This finding was consistent with the findings made by some researchers (Akinwumiju, 1995; Riggio, 2000; Ajayi, 2005) and it suggests that teachers in senior secondary schools in the State showed more commitment to their job at the expense of job satisfaction.

CONCLUSION

Considering the findings of this study, it was concluded that teachers' job satisfaction was a critical variable. In teachers' job performance in secondary school in Ekiti State, Nigeria. Evidences from the findings have led the researcher to conclude that teachers' job performance in secondary school in the State was a function of job satisfaction.

Based on the findings of this study, it was recommended that the Ekiti State government, Nigeria should provide better welfare services for teachers in other to enhance their productivity. The conditions of service of teachers should be better improved to enable them rise to the highest peak in the public service. This is necessary in other to remove any discrepancies between them and their colleagues in the civil service. Suitable office accommodation should be provided for teachers in other to enhance a high level of job performance in the schools.

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