The Vulnerability of Landlocked Developing Countries to External Shocks

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List of Acronyms and Abbreviations

AfT	Aid for Trade
APoA	Almaty Programme of Action
BoP	Balance of Payment
EAC	East African Community
FDI	Foreign Direct Investment
FSLI	Federal Savings and Loan Insurance
GDP	Gross Domestic Product
GHI	Global Hunger Index
GLOF	Glacial Lake Outburst Flood
GNI	Gross National Income
GNP	Gross National Product
HIPC	Heavily Indebted Poor Countries
ICT	Information, Communication Technologies
IDPs	Internally Displaced Person
IFI	International Financial Institution
IFPRI	International Food Policy and Research Institute
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
ITU	International Trade Union
LAC	Latin American Countries
LDCs	Least Developed Countries
LLDCs	Landlocked Developing Countries
MDRI	Multilateral Debt Relief Initiative
ODA	Official Development Assistance
OPEC	Oil Producing and Exporting Countries
PPF	Production Possibilities Frontier
SIDS	Small Island Developing States
S&L	Savings and Loans
UN-ECA	United Nations Economic Commission for Africa
UN-DESA	United Nations Departments of Economic & Social Affairs
UN-OCHA	UN Office for the Coordination of Humanitarian Affairs
UNCTAD	UN Conference on Trade and Development
UNHCR	United Nations High Commission for Refugees
USAID	United States Agency for International Development

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Executive Summary

External shocks are defined as the unexpected and unpredictable events that originate from outside a country that affect a variable, either positively or negatively. Adverse shocks are of particular interest and concern to policymakers. Landlocked developing countries are vulnerable to external shocks owing to their attributes, which include but not limited to; lack of export diversification, limited productive capacities, dependence on export revenues from a limited number of commodities, prohibitive trade transaction costs, lack of export competitiveness, concentration of exports, over-dependence on official aid, high external debt, inadequate foreign reserve levels, and reliance on remittances from migrants abroad. Their geographical location, in politically and ecologically unstable parts of the world, means increased exposure to natural, social and political fallout that occur elsewhere.

For countries that are dependent on a limited number of commodities and minerals, such as the LLDCs, perturbations overseas could lead to the collapse of export markets with dire foreign revenue implications. Economic difficulties in the more developed countries diffuse rapidly into countries that are more dependent on them. Political and social turmoil have sent a wave of people across national borders. The sudden arrival of a large number of refugees may overwhelm a host country, especially if it is small and ill prepared, as are many LLDCs. Refugees fleeing a tumultuous country may generate shockwaves to host countries that lack the necessary capacity to cope. This can create new sets of challenges such as trans-boundary conflicts, illicit flow of arms, environmental degradation, and the spread of communicable diseases. Even if these challenges do not arise, the hosting of refugees impose an economic cost that is not easy to quantify.

At the household level, external shocks may cause loss of a job, income and livelihood. Low income families that face external shocks may decide to cut back expenditure on food, healthcare and education in order to deal with a sudden and unexpected decline in income. Such measures hold medium to long term implications; they reinforce poverty, inequality and cause contractions in productivity levels. As observed, severe shocks, such as an outbreak of violence, famine or contagious disease may precipitate a mass inflow of refugees. Some studies show that sudden drops in the inflow of critical resources could plunge a country into a vicious cycle of poverty due to external shock-related instability, which fuels higher poverty, in turn, increasing a country's exposure to shocks and further instability.

External shocks, and their impact on the development outcomes of the LLDCs, have not garnered much interest until fairly recently. A review of various reports of the Secretary-General, and the General Assembly resolutions since the adoption of the Almaty Programme of Action (APoA) reveals that external shocks were only identified as an impediment to LLDCs' economic growth and development following the 2007 global economic and financial crises that were sparked by serious market instabilities in the U.S. housing and mortgage industry[1].

Until the now-receding global crisis hit, much of the multilateral discussions, regarding global efforts to assist developing countries (including LLDCs) has been with regards to addressing the external debt burden, how to promote external trade, external financing and external assistance. For instance, at its 3rd plenary meeting of 20 September 1996, the General Assembly, on the recommendation of the General committee, included in the agenda of its fifty-first session an item entitled: "Macroeconomic Policy Questions" that covered the external debt crisis, financing for development including net transfer of resources, trade and commodities. That report of the Second Committee did not mention external shocks explicitly, although it stressed the need for the international community to promote a favourable external economic environment through improved market access, stabilization of exchange rates, effective stewardship of international interest rates, increased resource flows, as well as improved access to technology by developing countries. Aid effectiveness is premised, in part, on stable and predictable international support measures, including financial flows.

The vulnerability of the LLDCs to external shocks has become a prominent policy issue in intergovernmental, inter-agency and expert-level group meetings. As part of global efforts to assess the reach of and fallout from the global financial and economic crisis, UN-OHRLLS prepared a report in 2009 which examined the impact of the crisis on the development prospects of the landlocked developing countries. While the timing of that report meant that it could only be anticipatory in nature, it warned that landlocked developing countries could not expect to be spared the effects of these crises. In addition, the report observed that the particular attribute of being landlocked could potentially magnify their effects. The close economic relationships that exist between LLDCs and neighboring countries, important ties that are relied upon to overcome transportation disadvantages may magnify both real and financial sector effects, if neighboring countries fare particularly poorly with respect to the crises.

Social, economic and environmental fallout from economic shocks is of great concerns to landlocked developing countries. Vulnerability to external shocks and how this could be addressed featured prominently in each of the three regional review meetings on the comprehensive ten-year review of the APoA. Participants at one of the inter-agency consultative group meetings organized by UN-OHRLLS in 2013 listed external shocks among challenges that have emerged since the adoption of the Almaty Programme of Action (APoA), and emphasized that the 10-year review conference should take them into account. A number of LLDCs have likewise expressed similar sentiments in their national reports on the implementation of APoA. External shock are routinely identified among other "new" challenges and development aspects requiring keen attention, such as: increased dependency on natural resource-based commodities; rising food and energy costs; social unrest and political implications; climate change, desertification and land degradation; increased austerity measures; importance of the service industry and the growing importance of South-South and triangular cooperation.

It is increasingly acknowledged that landlocked developing countries are particularly vulnerable to external shocks due to their geographical disadvantage, smallness in land size and population, and other structural

1 The São Paulo Consensus or the outcome document of the 2004 United Nations Conference on Trade and Development speaks about the impact of external shocks to developing countries in general

impediments. Institutional deficiency, lack of export diversification, limited productive capacities, dependence on export revenues from a very limited number of commodities, prohibitive trade transaction costs and lack of export competitiveness, concentration of exports directed to advanced economies, dependence on official aid, high external debt, inadequate foreign reserve levels, and reliance on remittances from migrants abroad collectively compromise LLDCs' ability to deal with external shocks. Indeed, recent experiences have shown that economic growth and social well-being of landlocked developing countries are closely tied to the status of the global economy, and that external shocks are transmitted through commodity price volatility, demand and high transaction costs, among others.

A number of policy recommendations on how to address external shocks have been articulated in different fora. For instance, LLDCs have been encouraged to pursue a continued prudence in macroeconomic management with the aim of building up resilience and diversification together with strong social protection mechanisms. The international community and transit countries have been urged to support LLDCs to strategically transform their economies so as to enhance their competitiveness in the global markets, build resilience to external shocks and achieve the sustainable economic growth necessary for promoting investment in social and human development. UN-OHRLLS has prepared a report on the impact that climate change, dryland and desertification have on the LLDCs. This report offers a set of climate change adaptation and mitigation measures that can help landlocked developing countries cope with or address climate change challenges.

An effective way to address vulnerabilities to external shocks is to deal with their root causes. LLDCs have been working hard to reduce their costs of trade, enhance their productive capacities, diversify their exports, improve export competitiveness, create viable and sustainable economies, and strengthen resilience to shocks. To this end, the flow of foreign direct investment (FDI), official development assistance (ODA), and appropriate technologies play an important role in helping LLDCs' build up their resilience. This report examines the impacts of three types of external shocks: financial and economic shocks; social and political-related shocks; and natural disaster and climate change-related shocks.

I. Economic and Financial Shocks

External shocks that grow out of economic and financial crisis are both severe and common. In an increasingly integrated and digital global economy, impacts from these crises travel rapidly, channeled through several pathways that are enabled by globalization and market integration forces. The financial and economic crises that first appeared in 2007 in the United States have been especially damaging to the economies of the LLDCs. Before the crises peaked, their annual GDP growth rate was rapidly approaching 10 percent in 2006. At an average annual rate of 9.3 percent, economic output was particularly strong between 2005 and 2007. Per capita incomes rose strongly as well, averaging 7.6 percent over the same period. However, since 2008, annual GDP growth rate declined precipitously to about 4.1 percent in 2009 while per capita GDP growth slowed to just 1.8 percent. In terms of economic expansion, LLDCs are yet to recover to their pre-crisis levels.

It is important to note here that landlocked developing countries performed consistently better than the world average before and during the crisis. The crises also spawned immediate downward pressure on the savings rate as well as investment. Worldwide capital formation which had been rising steadily levelled off at 23.0 percent of GDP in 2007 – then began to decline. The full impact on the LLDCs and transit developing countries was delayed and somewhat short-lived: capital formation rate for the two groups kept rising until well after 2009 then declined. Both landlocked and transit developing countries have since bounced back to the pre-crisis capital formation levels.

Official Development Assistance

ODA disbursements to LLDCs have steadily increased in recent years. However, the impact of the 2007 crises on these countries can be identified by analyzing ODA in terms of GNI, contribution to capital formation and as a percentage of imports of goods, services and primary income. Data suggests that LLDCs performed poorly during the crises years, with these measures trending much lower than transit countries as well as global averages. For instance, three-year averages that correspond to the pre and during the crisis period show that net ODA receipts as a share of GNI of the LLDCs declined by 16 percent, against a global decline of just 2 percent. Likewise, net ODA as a percentage of capital formation fell 24.4 percent – against the global decline of just 0.9 percent. In fact, 22 of the 31 LLDCs[2] manifest contraction since the crisis. Access to short-term debt, multilateral and bilateral development assistance, and rebounding commodities markets contributed significantly to stabilizing LLDCs from external market perturbations.

External Debt

LLDCs' large external debt burden represents a development impediment that merits serious consideration. While debt relief initiatives have yielded laudable results, there is a need to examine how external debt acts as a conduit for external shocks. Collectively, external debt and debt repayment remain a heavy burden on the LLDCs. For the full term of APoA (2003-2013), the stock of external debt as a percentage of GNI was around 51.3 percent, compared to just 25.3 percent for transit developing countries. For many LLDCs, external debt repayment is dependent on the mobilization of domestic resource as well as on foreign capital – including official development assistance. Unfortunately, in times of economic and financial crises, development partners tend to reduce their aid budgets, which further undermine the ability of aid-dependent LLDCs to service their external debts. In other words, reductions in aid receipts can cause precarious debt situations to go from bad to worse. One possible long term implication of such cascading scenario is that a country could become unable to access credit on the international markets, thereby stalling its growth prospects. It is important to once again refocus on the problem of external debt burden and resultant shocks. It is critical that LLDCs receive some form of debt relief assistance, especially those with high debt burdens, to prevent them from entering into unsustainable debt situations. The deepening of knowledge on how debt amplifies the impact of external shocks can undoubtedly trigger appropriate responses that could soften their impact.

External Trade

Expressed as a share of GDP, trade volume is generally higher for LLDCs than global average as well as for transit developing countries. Between 2005 and 2007, trade was about 84.3 percent of the LLDCs' GDP, compared to 51.6 percent for transit developing countries, and 57.4 percent for the world. Higher trade openness among the LLDCs implies disproportionately greater vulnerability to world market perturbations. In fact, a heightened dependence on commodities for exports and the importation of high-valued products by vast majority of LLDCs has contributed to their continued terms of trade deterioration. The current global crisis has impacted LLDCs' external trade balance much more severely than any other group of countries.

2 While there are 32 LLDCs, much of the analysis in this report does not include South Sudan, a member of the group since 2014.

LLDCs' trade volume as a share of GDP declined 7 percentage points, to 78.3 percent between 2008 and 2010. Over the same period, transit developing countries witnessed a modest 1.2 percent contraction, while global average fell just 0.5 percent. Merchandise trade was highest in 2008, when it reached 72.8 percent of LLDCs' GDP. However, it plummeted nearly 15 percentage points to 58.4 percent in 2009. Merchandise trade from transit developing countries declined 10 percentage points over the same period, but from a lower peak of 51.9 percent in 2008. Exports of goods and services reached 44.8 percent of GDP in 2008, but fell 36.4 percent the following year.

Balance of Payment

Balance of payments (BoP) for all major groups of countries were negatively impacted by the 2007 financial and economic crisis. While this impact showed up globally almost immediately as greater exposure to a BoP crisis when the crisis peaked (2007-2008), LLDCs showed a lag – even showing a slightly increasing BoP surplus during the 2007/08 period – and then declining the following period (2009/10). While developing economies saw a more than 50 percent reduction in their BoPs, they didn't go into negative. Further analysis of data indicates that relative to the size of their economies, LLDCs receive relatively small foreign capital, including FDI and ODA. To most LLDCs, the challenge, going forward, is how to attract and retain foreign capital to spur growth.

International Reserves

International reserves of a country are a key determinant of how such a country responds to certain types of exogenous shocks, especially those related to exchange rate volatility. Since 2007, LLDCs as a group rapidly increased their holding of international reserves from US$ 81 billion to over US$ 135 billion in 2012. While impressive, the 69 percent increase is well below that of LDCs – a group that experienced an 80 percent increase over the same period. Another group of vulnerable countries, the SIDS, increased their international reserves by 54 percent, to US$ 25.3 billion.

Migrant Workers' Remittances

Migrants' remittances, often person-to-person payments, are an important source of finance and foreign exchange, especially for low income countries. At the household level, remittances alleviate poverty and supplement incomes. They support consumption budgets and enhance capital accumulation. There is a growing empirical work which suggests that remittance-receiving households manifest a high propensity to save since they perceive it as transitory, rather than permanent income.

Migrants' remittances differ from one country to another, but are generally dependent on the quality and quantity of a country's international migrants' stock. United Nations Populations Division estimates that in 2013, 3.2 percent of the world's population was made up of international migrants. There were 232 million migrants in 2013, compared to 175 million in 2000, and 154 million in 1990. Between 2000 and 2010, about 4.1 percent of persons in a typical landlocked developing country were migrants. As a percentage of GDP, migrant remittances are often high for Tajikistan, Kyrgyzstan, Nepal, Lesotho, Moldova and Armenia. While the group-wide average was 3.9 percent in 2012, remittances as a percentage of GDP for top performers were as follows: Tajikistan (49.3%), Kyrgyzstan (32.7%), Nepal (27.2%), Lesotho (25.5%), Moldova (24.1%) and Armenia (14.6%).

While remittances are often deemed to be countercyclical, external shocks, such as the clampdown on illegal immigrants, steep rise in unemployment, social and economic instability, along with natural disasters in immigrant-host countries could fuel sudden reduction in remittance flows. Sudden, unexpected and sustained contractions in remittance income could imply enormous financial and economic challenges at the household as well as national level for remittances-dependent communities.

II. Political and Social Instability-Related Shocks

Not only do LLDCs face transit and geographical disadvantages, many are located in politically unstable regions. A number of LLDCs are relatively young countries. For instance, South Sudan, following years of violent struggle, became the world's youngest nation in 2011, while many LLDCs in Eastern Europe and Central Asia (and their neighbors) have only been in existence for less than a quarter of a century. While there is evidence that countries tend to realize positive spill over benefits from economic growth experienced elsewhere in their neighborhood, this is hardly true for landlocked developing countries. Globally, it is estimated that a stable country growing at 1 percent per year, can induce nearly 0.4 percent growth in her neighbors. Unfortunately, a number of LLDCs with unstable neighbors have been adversely impacted by intra-regional and cross-border conflicts and wars.

With a global population of about 6 percent, UNHCR reports that out of a total global refugee population of 9.9 million in 2012, 1.2 million were in the LLDCs, which was about 13 percent. Indicative of internal turmoil in the LLDCs, a full 42 percent of all persons in IDP situations-like around the world were located in the LLDCs. Persons in IDP situations-like group include all persons displaced within their country. It also includes persons who are inside their country of nationality or habitual residence and who face protection risks similar to those of IDPs but who, for practical or other reasons, could not be reported as such. 42.6 percent of all refugee reception and transit logistics activities take place in landlocked developing countries.

There are direct and indirect costs associated with hosting refugees. Some of these are borne by the international community. Giving refugees protection and safe haven in the face of persecution, torture, and death is critical international moral responsibility.. However, host nations must content with increased strain on already overstretched infrastructure, such as roads, railroad, telecommunication network, and water as well as electricity grid. Indeed, despite their small population and land size, LLDCs bear greater burden when it comes to refugees and internally displaced persons.

III. Disasters And Climate Change-Related Shocks

The need to promote recovery and reconstruction of impacted communities, following a natural disaster can draw resources and attention away from dealing with long-term structural impediments, such as landlockedness and extreme poverty. Some disasters have prompted policy changes with cumulative negative long term implications to LLDCs. Extreme weather, punctuated by unpredictable rainfall patterns is closely related to climate change, and it is one more example of external shocks. Climate change-related shocks threaten livelihoods, food security and overall well-being of individuals and communities. Evidence shows that while hunger prevalence in LLDCs has declined faster than elsewhere, it is still unacceptably high. Between 1990 and 2012, the Hunger Index for LLDCs decreased by 38 percent – compared to 32 percent for transit developing countries, and 35 percent for 120 countries where measuring hunger is considered most relevant. Burundi and at least one-fourth of the populations in Ethiopia, Chad and Central African Republic remain acutely vulnerable to severe hunger that arises, mainly from perennial droughts.

Recommendations

It is not practical for any economy to be completely insulated from external shocks. International trade, globalization, political and economic integration efforts, as well as accelerated free flow of resources, including workers across national borders will always continue to propagate exogenous shocks. However, it is important for policymakers to seek measures that reduce exposure to and impacts of such shocks. In general terms, measures should be undertaken to: strengthen resilience at national and household levels; build bulwarks to manage fallout; and finally, establish and strengthen the functioning of core institutions. The following are some suggestions on how LLDCs and the international community can make this possible.

Actions by the LLDCs

1) **Diversification:** there is an urgent need for LLDCs to pursue measures that would lead to diversification across multiple fronts. Diversification represents the most pragmatic and sustainable means of spreading risks. In particular, LLDCs must undertake investment and policy re-orientation that would create new and alternative sectors capable of supporting economic growth, in tandem with the preponderant agriculture and mining sectors.

2) **Economic transformation:** closely related to but different from diversification, economic transformation implies a substantive reorganization of the economy, its actors and how they interact. Economic transformation require serious commitment to promote industrial development and value addition, transitioning from low-productive informal sector to more efficient production arrangements that have strong backward and forward linkages capable of supporting rapid and inclusive growth.

3) **Safety nets:** the need to maintain strategic budgetary and resource surpluses at household and national level is apparent. For Governments, this means pursuing sound fiscal and monetary policies capable of creating budget and international reserve surpluses. At the household level, it implies holding of additional liquid assets and food stocks. Targeted social protection measures for the vulnerable population will be crucial.

4) **Science and technology:** innovation and invention can be employed to adapt and mitigate external shocks, especially those that relate to climate change. LLDCs should prioritise food security concerns and make efforts to achieve higher standards of living through measures such as mechanised farming, irrigation schemes, greenhouse cultivation, as well as non-farm rural employment opportunities.

5) **Strong domestic and regional economies:** external shocks, such as world market price volatility, can often times be mitigated using local measures. Each country must take stock of her response options, address weaknesses, and develop new tools. There is a need, for instance, to strengthen and grow domestic demand. Such measures should be complemented by stronger regional economies. Countries can compensate shortfalls in the external markets by stimulating domestic and/or regional demand.

6) **Alternative routes to sea:** many LLDCs do not have multiple routes to the sea. Efforts to open alternative routes are often prevented by distance, cost and difficult geography which include desert and mountainous terrain. The continued reliance on a single transit route is untenable. Stronger ties with neighbouring countries and regional efforts can lead to the development of such alternative transit routes and corridors. It is also important to underscore the fact that investing in air transport infrastructure can fast track economic diversification and structural transformation efforts.

7) **Governance:** efficient and functioning government institutions often inspire investor confidence, promote sound policy development and underwrite efficiency and productivity. Many LLDCs need to make a commitment to develop institutions and policies critical in promoting growth and addressing external shocks.

Actions by the International Community

1) **Coordinated response:** the 2007 financial and economic crisis provided fresh impetus for close intergovernmental arrangements that would support joint and coordinated response to external shocks. It is important that coordination is achieved at sub-regional, regional and global levels.
2) **Compensatory mechanism**: viewed as externalities, there should be a mechanism through which developing countries that suffer external shocks receive compensation and support to recover. For this to work it would be important for multilateral efforts to identify and approximate external shocks causes.
3) **International insurance scheme:** the creation of a special external shocks-related insurance scheme, under international support measures, is one way the international community can demonstrate their commitment to finding a lasting solution to problems created by exogenous shocks. A number of countries already have nascent insurance schemes that protect farmers and other rural communities against climate change-related events, such as cyclones, hailstorms, floods and droughts.
4) **Development and humanitarian assistance**: in the event of extreme external shocks, emergency funding is required to support recovery of affected economies and communities. However, some shocks are slow and indistinct at the global or regional level. LLDCs suffer greater damage from all sorts of external shocks: financial, economic, social, political, environmental, natural etc. it is incumbent upon the international community and development partners to provide adequate, predictable and well-timed assistance through different support measures. A novel way to promote aid effectiveness may be to make portions of development and emergency assistance dependent on country-level exposure and resilience to external shocks. In other words, some humanitarian assistance can be pegged on perceived levels of exposure to shocks whereas portions of development assistance can be extended on account of a country's resilience to external shocks, or lack thereof.
5) **Resilience-building measures**: Comprehensively address, at the global level and on a more sustainable basis, primary and more predictable sources of external shocks, including but not limited to: financial and economic crises, climate change, social instability, political unrest, armed conflicts, the refugee crisis, and other anthropogenic disasters. There is also a need to pursue and develop a set of resilience building measures, and adequate investment in preventive measures to protect the global community from external shocks. In addition, such strategies can limit fallout from such occurrences. Climate change adaptation and mitigation solutions are fitting examples of such interventions.

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Introduction

The rapidly changing global development landscape is increasingly spawning more frequent crises, among them, external shocks. Formulating ways through which impacts from these shocks can be addressed has become both urgent and a matter of priority. This is especially important if development gains, including economic growth and poverty reduction can become truly sustainable and inclusive. External shocks undermine efforts to promote economic growth and development. Inappropriate macroeconomic policies are constantly contributing to the formation of potentially destructive systemic shocks. For LLDCs, external shocks are, first and foremost, tied to their inevitable reliance on the political and socioeconomic stability, infrastructure and institutional quality of their coastal transit neighbors for seaborne trade. This is a unique challenge that other developing countries do not necessarily face. External shocks – and the instability they generate – compound the problem of landlockedness by limiting output, inhibiting trade, disrupting bilateral and regional integration efforts – all of which lead to higher poverty rates and the entrapment of more people in the vicious cycle of poverty.

Impacts of external shocks are as destructive at the macro level as they are at the micro level. Economic and financial shocks are transmitted from the global economy to the national economy through multiple channels, such as trade, private and public capital flows, and immigrant remittances. External shocks of financial and economic nature are pronounced in small, open, and less diversified economies that are more integrated at the global level. While some of the less-open LLDCs are not closely integrated into global markets and institutions, they are, nevertheless, small and economically less diversified.

For countries that are dependent on a limited number of commodities and minerals, such as the LLDCs, perturbations overseas can lead to the collapse of export markets with dire foreign revenue implications. Economic difficulties in the more developed countries diffuse rapidly into countries that are more dependent on them. Political and social turmoil have forced people to migrate and cross national and territorial frontiers. The sudden arrival of a large number of refugees may overwhelm a host country, especially if it is small and ill prepared, as are many LLDCs. Refugees fleeing a tumultuous country may introduce new shockwaves to host countries that lack the necessary capacity to cope. This can create new sets of challenges such, as trans-boundary conflicts, illicit flow of arms, environmental degradation, and the spread of communicable diseases Even if these challenges do not arise, the hosting of refugees impose an economic cost that is not easy to quantify.

At the household level, external shocks may cause loss of a job, income and livelihood. Low income families that face external shocks may decide to cut back expenditure on food, healthcare and education in order to deal with a sudden and unexpected decline in income. Such measures hold medium to long term implications; they reinforce poverty, inequality and cause contractions in productivity levels. As observed, severe shocks, such as an outbreak of violence, famine or contagious disease may precipitate a mass inflow of refugees. Some studies show that sudden drops in the inflow of critical resources could plunge a country into a vicious cycle of poverty due to external shock-related instability, which fuels higher poverty, in turn increasing a country's exposure to shocks and further instability.

External shocks, and their impact on the development outcomes of the LLDCs, have not garnered much interest until fairly recently. A review of various reports of the Secretary-General, and the General Assembly resolutions since the adoption of the Almaty Programme of Action (APoA)[3] reveals that external shocks were only identified as an impediment to long term economic growth and development following the 2007 global economic and financial crises that were sparked by serious market instabilities in the U.S. housing and mortgage industry.

Until the now-receding global crisis hit, much of the multilateral discussions, regarding global efforts to assist developing countries (including LLDCs) has been with regards to addressing the external debt burden, how to promote external trade, external financing and external assistance. For instance, at its 3rd plenary meeting of 20 September 1996, the General Assembly, on the recommendation of the General committee, included in the agenda of its fifty-first session an item entitled: "Macroeconomic Policy Questions" that covered the external debt crisis, financing for development including net transfer of resources, trade and commodities. That report of the Second Committee did not mention external shocks explicitly, although it stressed the need for the international community to promote a favourable external economic environment through improved market access, stabilization of exchange rates, effective stewardship of international interest rates, increased resource flows, as well as improved access to technology by developing countries. Aid effectiveness is premised, in part, on stable and predictable international support measures, including financial flows.

The vulnerability of the LLDCs to external shocks has become a prominent policy issue in intergovernmental, inter-agency and expert-level group meetings. As part of global efforts to assess the reach of and fallout from the global financial and economic crisis, UN-OHRLLS prepared a report in 2009 which examined the impact of the crisis on the development prospects of the landlocked developing countries. While the timing of that report meant that it could only be anticipatory in nature, it warned that landlocked developing countries could not expect to be spared the effects of these crises. In addition, the report observed that the particular attribute of being landlocked could potentially magnify their effects. The close economic relationships that exist between LLDCs and neighbouring countries, important ties that are relied upon to overcome transportation disadvantages may magnify both real and financial sector effects, if neighbouring countries fare particularly poorly with respect to the crises.

Social, economic and environmental fallout from economic shocks is of great concerns to landlocked developing countries. Vulnerability to external shocks and how this could be addressed featured prominently in each of the three regional review meetings on the comprehensive ten-year review of the APoA. Participants at one of the inter-

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agency consultative group meetings organized by UN-OHRLLS[4] in 2013 listed external shocks among challenges that have emerged since the adoption of the Almaty Programme of Action (APoA), and emphasized that the 10-year review conference should take them into account. A number of LLDCs have likewise expressed similar sentiments in their national reports on the implementation of APoA. External shock are routinely identified among other "new" challenges and development aspects requiring keen attention, such as: increased dependency on natural resource-based commodities; rising food and energy costs; social unrest and unplanned regime change; climate change, desertification and land degradation; increased austerity measures; importance of the service industry and the growing importance of South-South and triangular cooperation.

It is increasingly acknowledged that landlocked developing countries are particularly vulnerable to external shocks due to their geographical disadvantage, smallness in land size and population, and other structural impediments. Institutional deficiency, lack of export diversification, limited productive capacities, dependence on export revenues from a very limited number of commodities, prohibitive trade transaction costs and lack of export competitiveness, concentration of exports directed to advanced economies, dependence on official aid, high external debt, inadequate foreign reserve levels, and reliance on remittances from migrants abroad collectively compromise LLDCs' ability to deal with external shocks. Indeed, recent experiences have shown that economic growth and social well-being of landlocked developing countries are closely tied to the status of the global economy, and that external shocks are transmitted through commodity price volatility, demand and high transaction costs, among others.

The foregoing notwithstanding, recent experiences have clearly demonstrated that on their own, many LLDCs are incapable of withstanding external shock impulses. Many hold insufficient stocks of foreign reserves, and cannot wither external shocks, even of a short-term nature, without seeking external resources. But external shocks can be especially devastating since they have the potential to simultaneously affect developing countries and their development partners. This implies that there are times when countries in social and economic throes, which arise from sudden changes in external events, can and should expect little support from development partners that are dealing with their own crisis. To be precise, there is often a notable decline in ODA receipts in the global south during periods of financial and economic difficulties in the more advanced economies.

Dealing with External Shocks

A number of policy recommendations on how to address external shocks have been articulated in different fora. For instance, LLDCs have been encouraged to pursue a continued prudence in macroeconomic management with the aim of building up resilience and diversification together with targeted and effective social protection measures. The international community and transit countries have been urged to support LLDCs to strategically transform their economies so as to enhance their competitiveness in the global markets, build resilience to external shocks and achieve the sustainable economic growth necessary for promoting investment in social and human development. UN-OHRLLS has prepared a report on the impact that climate change, dryland and desertification have on the LLDCs. This report offers a set of climate change adaptation and mitigation measures that can help landlocked developing countries cope with or address climate change challenges.

An effective way to address vulnerabilities to external shocks is to first consider their root causes. LLDCs have been working hard to reduce their costs of trade, enhance their productive capacities, diversify their exports, improve export competitiveness, create viable and sustainable economies, and strengthen resilience to shocks. To this end, the flow of foreign direct investment (FDI), official development assistance (ODA), and appropriate technologies play an important role in helping LLDCs' build up their resilience.

4 Brainstorming meeting on the priorities of a New Development Agenda for the LLDCs, held at the United Nations Headquarters in March, 2013.

On its part, the United Nations General Assembly has repeatedly expressed concerns that the economic growth and social well-being of the landlocked developing countries remain extremely vulnerable to external shocks and other challenges[5]. It was against this backdrop that the General Assembly invited the international community to assist LLDCs in strengthening their resilience, and in protecting the advances made towards the realization of the Millennium Development Goals, and the priorities set out in APoA. In addition, the General Assembly has encouraged UN-OHRLLS to partner with international organizations, United Nations regional commissions as well as research institutions in *undertaking studies and research on the vulnerability of the LLDCs to external shocks, and to propose a set of vulnerability indicators that could be used in designing an early warning system.* This current work is done in response to this request.

A comprehensive response to this invitation requires the identification of different types of external shocks that affect the LLDCs, such as economic, financial, social, political, natural, climatic etc. It also involves the comprehensive mapping of the structural conditions and transmission mechanisms that underlie determinants of macroeconomic and social vulnerabilities, such as incomes, demographic patterns, social cohesion and economic diversification. An integral part of such work would include a quantitative determination of the type and degree of exposure, and vulnerability to each of the identified shocks at the country, regional and global levels. Indeed, the development of sound models with superior predictive capacity can speak to the suitability of the indicators sought by the General Assembly.

This is the first of two reports on the subject. The current work adopts a qualitative approach in addressing the question of the common types of external shocks and their transmission channels. This report is prepared as a continuation and/or updating of the 2009 report on the subject. Efforts have been done to show, where possible, how external shocks have impacted the LLDCs. As readers will see, however, LLDC is a diverse group in which the lack of territorial access to a deep seaport constitutes, perhaps, the single most important common denominator. Against this backdrop, it is important to concede, from the outset, the difficulty (or limitations) of developing a representative model for a group of 32 vastly different countries dispersed across four continents: Africa, Asia, Europe and Latin America. Proposed policies for resilience will, in reality, be shock-specific, and preferably applicable to the affected countries or sub-region. In general, however, desired policies have the promotion of resilience, building up of coping strategies and capacities to withstand and counteract shocks, as well as reducing exposure to, and impacts of external shocks as their end goals.

Besides developing a set of indicators useful in formulating an early warning mechanism, this report advocates for national, regional and global policies and coordination arrangements to minimize exposure, frequency and impact from external shocks. The report should be seen as the starting point for similar though somewhat different work previously undertaken with respect to the Least Developed Countries (LDCs), and Small Island Developing States (SIDS)[6].

There is a need to undertake policy discussion with a view of developing a robust and credible external shock index for LLDCs that could be used to determine, among other things: guaranteed access routes to a seaport that are safe, shorter and cost effective, preferential market treatment and access; additional flow of development assistance; and multilateral mechanisms to ameliorate the most severe effects from shocks whose root causes lie outside the national borders. Taking vulnerability as an inherent risk on sustainability, sustainable development

5 For example; A/Res/67/222 and A/Res/66/205
6 Ultimately, this work is expected to lead to the development of robust vulnerability indicators that are linked to landlockedness. This work is motivated by the graduation criteria for Least developed countries (LDCs), and climate change vulnerability index developed for Small Island Developing States (SIDS)

goals cannot be designed and pursued without a comprehensive consideration of all forms of vulnerabilities, economic, social and environment. Vulnerability to external shocks borne out of landlockedness, small economy size and export concentration must be fully weaved into such considerations. Both endogenous and exogenous shocks and related instabilities negatively impact a country's economic growth, and fight against poverty.

This report is organized as follows: chapter one discusses the development challenges that arise from landlockedness and other salient features of the LLDCs. It provides a brief literature review on more recent studies that examine the economic impact of landlockedness. Chapter Two introduces the concept of external shocks and their associated development impacts. Chapter Three focuses on economic and external shocks as well as some of their transmission mechanisms, including: official development assistance; external debt; external trade; the balance of payment; and migrant workers' remittances. Chapter Four deals with political and social instability, while Chapter Five discusses disasters and climate change-related shocks. Policy recommendations are presented in Chapter Six.

CHAPTER ONE

The Challenges of Landlockedness

1.1 The Barrier of Landlockedness

The most distinguishing and obvious features of the LLDCs include, the lack of territorial access to the sea, remoteness from major world markets, and relatively small geographical, population and economy sizes. The absence of direct access to a sea-port, and ensuing international trade difficulties place LLDCs on an inherent development path disadvantage when compared to countries with coastlines and deep-sea ports. LLDCs must rely on the goodwill of their neighbours and face substantially greater transport costs and longer time to send and receive merchandise from overseas markets. In addition, LLDCs face other factors that impair development, such as difficult mountain topography and pervasive dryland ecology. Such severe difficulties are further amplified by unavoidable dependence on the political and economic stability, the infrastructure and the institutional quality of coastal transit countries.

Most LLDCs have underdeveloped markets, inefficient institutions, inadequate infrastructure and weak policy formulations. The full participation in international trade is thus hindered by both internal and external factors. LLDCs have to deal with inadequate transit facilities, cumbersome customs and border procedures, as well as other contingencies related to relying on another country. Landlocked countries are also affected by social and political upheavals, economic distress, and to some extent, environmental disasters that occur in transit countries.

Most LLDCs do not have the luxury of multiple routes to sea, a situation that inherently creates transit risks. Political and social unrest in a transit country can shut down the only available transit route to the sea, thereby cutting off landlocked countries from international markets. This problem is further compounded by the inability of many landlocked developing countries to use the more expensive air transport because of the disproportionately high-bulk, low-value commodities content of their exports.

Inadequate equipment and facilities, weak institutions and a widespread lack of human and productive capacities along with a host of other challenges common in the LLDCs have contributed to their low level of economic growth. Across many regions of the world, the proliferation of advanced transport and communication technology, including mobile telephony, and high speed internet continues to drive transaction costs downwards. This trend has given rise to optimism that as international transport costs fall, LLDCs could finally begin to make significant progress in scaling the hurdle of smallness, landlockedness, remoteness and isolation. The reality for many LLDCs is different: transit, transaction and communication costs remain prohibitively high due in part, to factors already outlined. Limited connectivity to submarine communication has denied LLDCs the technology and information dividends that stem from robust internet backbones and high-speed internet connectivity. In fact, it's substantially expensive for households in LLDCs to access high speed internet of decent bandwidth than those in countries located closer to submarine communication cables. For instance, ITU[7] estimates that broadband monthly subscription charges in Bolivia, Kazakhstan and Armenia are in excess of US$ 21. Transit countries spend between US$ 10 to US$ 17 for the same. Given that many LLDCs are priced out of the more expensive satellite-based communication, they are likely to continue lagging behind their coastal neighbors.

It is important to underscore the fact that the degree of LLDCs' exposure to external shocks is dependent, in part, on the number of countries with whom they share a border. For better or worse, LLDCs tend to have relatively more neighbouring countries than transit states. The proximity to a wider range of countries inherently opens them to positive and negative externalities. Rather than be an opportunity for expanded market outreach, additional national borders have, at times, become frontiers for rebel and illegal activities, including human and drug trafficking.

Beyond the classical benefits such as trade creation and mutual support, regional cooperation provides a platform for more effective integration and participation in the world economy. Free trade agreements concluded within the frameworks of regional and bilateral integration reduce trade barriers considerably, and could ultimately result in unrestricted trade among participating members. With greater regional integration, economies of scale in the production and distribution of goods and services that is unattainable for individual countries due to their small size may eventually become feasible when countries team up.

The crafting of regional frameworks and the achievement of consensus on the same can prove to be much more difficult in instances where there are too many negotiating parties. Unfortunately, LLDCs tend to have relatively many neighbouring countries, and are thus often caught up in unwieldy and competing regional integration discussions, which often times contribute to the slow progress in implementing agreements that are designed, for instance, to eliminate tariffs and non-tariff barriers[8]. Even in regions where there are a few countries, the relatively small population and economy sizes of the LLDCs put them at a disadvantage when it comes to pursuing their priorities and interests. LLDCs are often at the mercy of bigger, stronger coastal economies – which also happen to be the majority.

Strong and genuine partnerships with neighbouring countries can help mitigate inherent disadvantages involved in trading with non-neighbouring, distant countries. Stronger regional integration and closer trading relationship

7 See UN-OHRLLS (2013) "Perspectives on the Priorities of a New Development Agenda for LLDCs", report of a brainstorming meeting held as part of the preparatory process for the comprehensive 10 Year review of the implementation of the Almaty Programme of Action, United Nations Headquarters, New York 20-21 March 2013 .
8 On average, a typical LLDC has 4.3 neighbours – substantially higher than the global average of 2.7. Out of 239 countries and territories worldwide, only 25 have more than 4 neighbours each. The higher-than-average number of neighbours for the LLDCs is striking since many of them tend to be the smallest, by land surface area, economy and population sizes, within their geographical regions. With the rare exception of Canada and the United States, large countries often have many neighbours. China has the most number of neighbours (16), followed by Russia (14), Brazil (10) and Sudan, Germany, and Democratic Republic of Congo (9 neighbours each). Among the LLDCs, Zambia, Mali and Niger have seven neighbours each. Lesotho is entirely landlocked within one country – South Africa.

with the neighbouring countries could also strengthens the ability of individual countries to deal with negative shocks, both external and country-specific through diversity and insurance against the uncertainty of relying on a single neighbour for transit and trade. But for many LLDCs, the development of close and stronger links with all neighbouring countries has also proved to be difficult.

LLDCs' exposure to external shocks can be best seen from their experiences following the 2007/08 financial and economic crises. Most LLDCs recorded strong economic performance since 2003, when the Almaty Programme of Action first went into effect. Annual GDP growth rate for the LLDCs was around 9.9 percent in 2006. At an annual average rate of 8.4 percent, economic output was particularly strong between 2006 and 2008. Per capita incomes rose rapidly as well, averaging 6.6 percent over the same period. However, since 2008, when the LLDCs sustained the severest blow from the crises, annual GDP and per capita growth rates slowed to 5.9 and 3.9 percent respectively. Impact from these crises was varied with some countries fairing worse than others. By and large, the economic performance of majority of the LLDCs was severely affected by the turbulence in the world markets. But much of the growth experienced was uneven, unsustainable, and incapable of delivering the much needed structural transformation, employment opportunities, and human and social development. Growth was largely driven by production and extraction of commodities that were experiencing rising demand and prices on the world market. These growth-supporting activities manifest very limited positive externalities on other sectors.

Following the sharp economic slump of the 2009, landlocked developing countries were able to boost export performance in 2010 with their share of merchandise trade reaching, for the first time, a level of above 1 percent. However, and as noted elsewhere, export performance varies greatly among the 32 countries. Those with substantial hydrocarbon deposits, such as Mongolia, Kazakhstan and Azerbaijan made the most significant gains and accounted for relatively greater component of total trade volume. Country-specific and disaggregated analysis gives a different picture: for a number of LLDCs, the past decade was marked by accelerated deindustrialization, heightened dependency on aid, compromised resilience to internal and external shocks, and the debilitating impacts of climate change.

These undesired results manifest at a time when LLDCs were routinely praised for policy improvements in the management of macroeconomic fundamentals, and enjoyed increased international recognition and support in the areas of transit and transport development under the Almaty Programme of Action. In addition, majority of the LLDCs are concurrent beneficiaries of sustainable development agendas of the millennium development goals (MDGs) and other multilateral development frameworks, such as the Istanbul Programme of Action (IPoA) for least developed countries.

Nearly seven years since the current shocks first appeared, economic recovery for world economies, including LLDCs, remains slow, tepid, and uneven. As a group, LLDCs remains a cluster of poor countries. GDP per capita for 19 of the 31 countries is well below US$1,000. That these countries deserve greater support from the international community, LLDCs occupy half of the bottom 20 slots on the latest Human Development Index (HDI) of the United Nations.

1.2 Empirical Estimation of Landlockedness

A number of empirical studies show that countries with high transport costs tend to experience less development as a result of the inverse relationship that exists between a country's growth performance, and its transport costs. LLDCs face a higher cost function and are largely uncompetitive. Reports by the World Bank (2007; 2013) routinely show that LLDCs incur, about twice the cost of imports and exports, as their maritime neighbours. Steeper cost functions they face in turn render them uncompetitive on the world markets, with their trade volume being up to 60 percent less than neighbouring coastal economies. According to the Human Development Index of the United Nations, and as previously noted, LLDCs manifest the worst development outcomes of any group, in terms of life expectancy, education and incomes. As Sub Saharan Africa has majority of the world's poor countries, African LLDCs are the poorest of the poor.

It is not surprising that LLDCs experience weaker growth than other group of countries, including maritime economies. Interest in the low trade volume and general underdevelopment of the LLDCs has given rise to some empirical work in this area. Using neoclassical theory, MacKellar et al. (2002) explain the negative relationship between landlockedness and growth by noting that crossing a border implies higher transaction costs due to customs and handling costs. In a nutshell, landlockedness is a binding development constraint that raises, permanently, import prices and reduces export revenues.

A recent econometric study, commissioned by UN-OHRLLS (2013) concluded that the cumulative costs of landlockedness were substantive. Upon estimating the total development cost of landlockedness, including economic and social dimensions, the study found LLDCs, on average, 20 percent poorer than they would have, had they had territorial access to the sea. This study collaborates well with other studies previously conducted in this area. For instance, a regression analysis of compounded average GDP growth rate, and gross domestic investment (expressed as a percentage of GDP) for some 92 developing countries over the period 1960-1992 revealed that LLDCs grew 1.5 percent slower per year than countries that were not landlocked (MacKeller et al., 2002). A study[9] by ECLAC found that being landlocked was equivalent to a loss of approximately 0.24 percent of the annual gross production of a typical LLDC. A later study[10] that examined 10 import and export corridors concluded that landlockedness amounts to a net loss of 0.5 percent of the GDP. That lack of territorial access to a seaport has direct impact to a country's trade potential is beyond dispute: research conducted by the United Nations Economic Commission for Africa (UN-ECA) shows that on average, transport costs in African landlocked countries represent 77 percent of the value of their exports. This makes them less competitive and results in smaller international trade flows (as reported in UNCTAD, 2013a).

Country size and the spatial distribution of the population are important predictors of economic growth. Higher coastal population density is associated with faster economic growth, while higher interior population density is associated with lower growth (Sachs and Gallup, 1999). Another study has demonstrated that almost all countries with populations that are concentrated within 100 kilometers of the coast were more successful in exporting labour-intensive manufactured goods (Radelet and Sachs, 1998). With their capitals lying at an average of 1370 kilometers from the nearest seaport, distance denies LLDCs the opportunity to successfully exploit labour-intensive manufacturing and other economic activities. This is in addition to the inability to explore economies of scale due to small economy sizes.

A paper that explored more broadly the relationship between shipping costs and overall economic growth across economies concluded that a doubling of the cost of transportation is associated with slower annual growth of slightly more than one-half of a percentage point (Radelet and Sachs 1998). Finding that a 100 percent increase in the distance between the export country and the U.S increases maritime transport costs by around 20 percent, an econometric model predicted that being landlocked was equivalent to being located 10,000 km farther away from markets (Clark et al., 2004).

Technological advancement and innovations made elsewhere take time to reach LLDCs. The successful transfer of new ideas, products and processes must first overcome bottlenecks associated with frontier crossings and mode of transport. Evidence suggests that the cost of frontier crossings is especially steep for landlocked

9 As reported by the Government of Paraguay in their APoA national report.
10 As 6 above

countries that are also least developed (LDCs) and/or in Africa. One study estimated that frontier crossing for African LLDCs added an equivalent of an extra 11,000 kilometers of maritime transport, whereas frontier crossing for European landlocked countries amounted to only a tenth of that cost, or 1,100 kilometers (Arvis, 2005). This finding is further buttressed by ITU finding that was previously discussed: that the cost of using ICTs in LLDCs was still prohibitively high. ITU estimates that broadband monthly subscription charges in Bolivia, Kazakhstan and Armenia are in excess of US$ 21, while transit countries spend between US$10 to US$17 for the same.

Landlockedness is also considered as one of the four 'poverty traps' that the bottom billion of the human population is unable to escape without outside help. This book notes that 38 percent of individuals in the bottom billion live in a landlocked country, with all but 1 percent in Africa. In addition, it says: "If you are coastal, you serve the world; if you are landlocked, you serve your neighbours." However, the book acknowledges that bad neighbours make international trade problematic for landlocked nations. Neighbouring countries that lack adequate infrastructure, embroiled in chaos, or governed by corrupt leaders contribute to the further isolation of landlocked nations from the global economy (Collier, 2007 p.57).

1.3 The Barrier of Landlockedness

The Economics of Landlockedness

By means of an illustration they term the Production Possibilities Frontier (PPF), economists contend that with finite pool of resources, production that takes place on a higher, better locus is only feasible through the accumulation of new stocks of factors of production, including capital and labour, international trade, and the use of new, improved technologies. At constant returns to scale, greater abundance of resources will result in a greater potential output for one or more products. Allocative efficiency is attained when output occurs for the most desirable goods and services that are in high demand. Production efficiency requires the optimal use of resources so that output occurs – not within the bounds of the PPF – but along the production frontier itself.

The efficient use of resources to produce the right mix of goods and services is optimally determined by forces that prevail in a competitive market, characterized by large pools of producers, buyers and sellers. Specialization and international trade enables countries to produce at an even higher locus in a more efficient and sustainable manner. Specialization – manifested in a greater degree of division of labour – leads to higher productivity. The ability to consistently produce along the highest possible frontier and for the frontier to shift outwards reflects economic growth processes.

All things being equal, a dynamic economy with a vibrant and competitive private sector operating in an enabling policy environment could benefit from globalization and international trade on the basis of specialization and comparative advantage. The inflow of resources, improved ways of producing and distributing goods and services, and international trade opportunities are all important drivers of growth in an integrated global society.

While specialization is assumed to take place on the basis of comparative advantage, lack of territorial access to the sea renders LLDCs uncompetitive, and hinders efforts to produce on a higher and better frontier. In addition, the limited flow of resources and ideas, including FDI, technology and innovation implies that for many of the LLDCs, production and consumption occurs within a lower production possibilities frontier.

Unlike other developing countries, landlockedness thus creates an additional binding constraint on the extent to which LLDCs can attract foreign resources, specialize and participate in international trade. This challenge is at the heart of factors that their growth. In addition, landlockedness coincides with other aspects that limit growth and full participation in international trade. These conditions include small population and economy sizes, and difficult geography. Small population and removed from major world markets faces more challenges in pursuing specialization on the basis of comparative advantage.

As a result of their geographical disadvantage, it is estimated that, on average, LLDCs face import and export costs that are twice as high as for adjacent transit developing countries. The cost differential erodes the comparative advantages of the LLDCs and renders them uncompetitive on the world market. High transaction costs imply lower marginal productivity, which explains the historically stunted wages, and low commodity prices.

Lack of a seaport and remoteness from key world markets prevents the effective transfer and adoption of science, technology and innovation. For example, while the laying of undersea fiber-optic cables has lowered the cost of accessing and using high speed internet around the world, internet connectivity remains low in most LLDCs due to the high costs of building and maintaining on land infrastructure. In addition, the fact that import transaction costs for LLDCs are twice as high as they are for transit developing countries, the acquisition of much needed technology remains out of reach for many of them. The inherent reliance on the goodwill of another country is an operational risk that renders LLDCs less attractive to foreign investors, including multinational corporations (MNCs).

The Almaty Programme of Action for the Landlocked Developing Countries was the first concerted global efforts to address the structural deficiencies manifested by LLDCs. This programme, which began in 2003, has been credited with some breakthrough, especially in galvanizing international support for infrastructural development both in the LLDCs and transit countries. But as a group, LLDCs still lag behind other groups of countries, underscoring the limited success of APoA. The failure of the programme to deliver strong performance, across different indicators, may be based on the fact that APoA was conceptually designed as a thematic response to transit concerns and access to the sea. It has since become apparent that the lack of territorial access to the sea is just one of the major impediments that confront landlocked economies. There is a need to provide an array of support tools that can help LLDCs reach for, and attain a higher production possibilities frontier. It is important to consider, for instance, how LLDCs can be made attractive to foreign capital; how these countries can successfully pursue economic transformation in favour of diversification and low-bulk, high-value products; achieve economies of scale and specialization; achieve inclusive growth, higher productivity and subsequently, incomes. The new development framework for LLDCs must address other important issues that APoA did not take into account, such as; climate change impact; governance and institutional weaknesses; external shocks, etc.

CHAPTER TWO

External Shocks

2.1 External Shocks

External shocks are defined as the unexpected and unpredictable events that affect a variable, either positively or negatively. In other words, external shocks come about when unpredictable change in an exogenous factor impacts endogenous economic variable. Both the unpredictable change and the variable within which the shock occurs are outside of the economic system. External shocks are propagated through a complex system of transmission mechanism.

There are different kinds of external shocks, with demand-shock, supply-shock, technology-shock being just but a few examples. Demand-shocks comprise of preference-related shocks such as abrupt changes in tastes and governmental expenses, and the abilities of both domestic and foreign markets to purchase and utilize goods and service produced. Supply shocks on the other hand are related to sudden drops in factors of production, which include but not limited to labour, energy, raw material, technology and capital. All these sudden and unexpected contractions hold real implications on the production possibilities of a firm and a country. Other papers (such as Aarle et al., 2008) speak of "nominal shocks", which affect nominal variables such as long term inflation rate and nominal interest rates without holding long term impact on real variables such as real interest rates and real inflation rates. Other kinds of external shocks include social, environmental or even policy-oriented.

Landlocked developing economies are highly susceptible to external shocks. The economic and financial crises, the rapid inflation of commodity prices – particularly food prices for countries that are not agriculturally self-sufficient, the soaring prices of oil (for resource-scarce landlocked countries), have all caused the terms of trade for LLDCs to deteriorate. Other common sources of external shocks that are of financial nature include: the sudden rise in international interest rates on the global markets; retardation of growth in world trade; shocks related to debt-accumulation and debt-repayment; shocks in international capital flows channeled through foreign direct investment, immigrant worker remittances, official development assistance, aid-for-trade, and other transfers. These and other external shocks are especially acute for LLDCs, which are largely small, undiversified, aid-dependent economies with weak formal institutions.

Paul Krugman (1988) identifies two principal causes of external shocks in most developing countries, including LLDCs. First, the shocks that arise from the goods market include: export-shocks brought about as a result of economic recessions in industrial countries. Such shocks adversely impact the price and volume of exports from developing countries; import-shocks are mainly felt in oil and food-importing countries due to a sudden and steep rise in prices; exchange rates and trade shocks which occur when the dollar rises while dollar-import prices of developing countries fall less than their export prices; and terms-of-trade shocks, defined by the ratio of the average price of a country's exports to the average price of its imports. This happens when a given volume of exports pays for a smaller volume of imports. Thus, the terms of trade for that country can be deemed to have declined. A different source of external shocks is capital market-related, which is determined by the cost of borrowing, and is fraught with borrowing restrictions. According to Krugman (ibid), these shocks are transmitted through the interest rate, inflation, external debt, and constraints on borrowing. Countries with huge debt, short period of maturity and low foreign exchange reserves suffer most when there is a crisis of confidence about their ability to repay debt. Unfortunately, many LLDCs are short on foreign exchange reserves, and have unsustainably large debt burdens.

Economies that rely on foreign resources and foreign markets often suffer more adverse external shocks than those that are less dependent. As already noted, external shocks affect LLDCs through among others; the terms of trade, international interest rates, foreign direct investment, and the supply of raw material, equipment and technology. There exist external shocks that take social and political dimensions as well. Policy reaction and policy set-up may dampen or amplify the consequences of external shocks. Lack of an appropriate and timely economic strategy to manage adverse external shocks could worsen the plight of these economies, making them permanently impotent of reacting to external shocks due to their heavy reliance to external support. It has also been shown that economic recessions abroad often cause asset misallocation whose adjustment may require reduction in the flow of foreign resource to dependent countries.

An external shock in the form of a sudden and prolonged scarcity in imported essential inputs could lead to output falling below the economy's capacity to produce, even with no decline in domestic resource stock. This problem could be caused by contractions in foreign exchange availability, which determines the economy's purchasing power for imports. If the inputs in short supply include machinery and equipment, this could have further implications on investment and future output capacity, productivity and incomes in the affected sectors.

Besides appropriate policy response, an economy facing external shocks requires to make real adjustments in order to maintain course, and achieve predetermined output, consumption, investment and income targets in the medium to longer term. Inappropriate policy responses may lead to a worsening of the impact of external shocks. For instance, a country facing demand contraction for its exports might decide to scale back output. Such a measure, if taken drastically, could fuel unemployment of both people and plant, thereby causing reduction in incomes and a rise in poverty levels at the household level. A country facing substantial cuts in crucial aid package may decide to cut back its expenditure by undertaking actions, such as fallowing employees and postponing important reforms.

Economic recovery may call for fiscal adjustments to limit damage to demand in the short term. Monetary policy could also be pursued to support both demand and production in the principal sectors. At the international level, coordinated structural policy response supported by other measures could spur potential output and lead to global demand rebalancing.

2.2. Development Challenges of External Shocks

Landlocked developing countries remain vulnerable to external shocks owing to their lack of export diversification, limited productive capacities, dependence on export revenues from a limited number of commodities, prohibitive trade transaction costs and lack of export competitiveness, concentration of exports directed to advanced economies, dependence on official aid, high external debt, inadequate foreign reserve levels, and reliance on remittances from migrants abroad. The geographical location of many LLDCs is an important determinant to their exposure to social and political fallout in neighbouring countries.

At the country level, external shocks present serious challenges to efforts to promote policy development and structural transformation, including investment in core infrastructure, technology and factors of production. These shocks slow down economic growth, productivity, and incomes. They also weaken foundations of important institutions. External shocks reinforce the vicious cycle of poverty and general underdevelopment by obliterating social and economic safety nets, undermining system-wide resilience, and at the same time reinforcing dependence on external assistance.

Regional integration is often seen as a rational response to the difficulties faced by regions with many countries that are landlocked and have small national markets (Hartzenberg, 2011). A number of countries cite uncertainties and external shocks as some of the reasons for the slow progress in concluding regional integration arrangements and persistent member overlap. The problem undermines efforts to promote bilateral and regional infrastructural development meant to ameliorate the challenges of landlockedness.

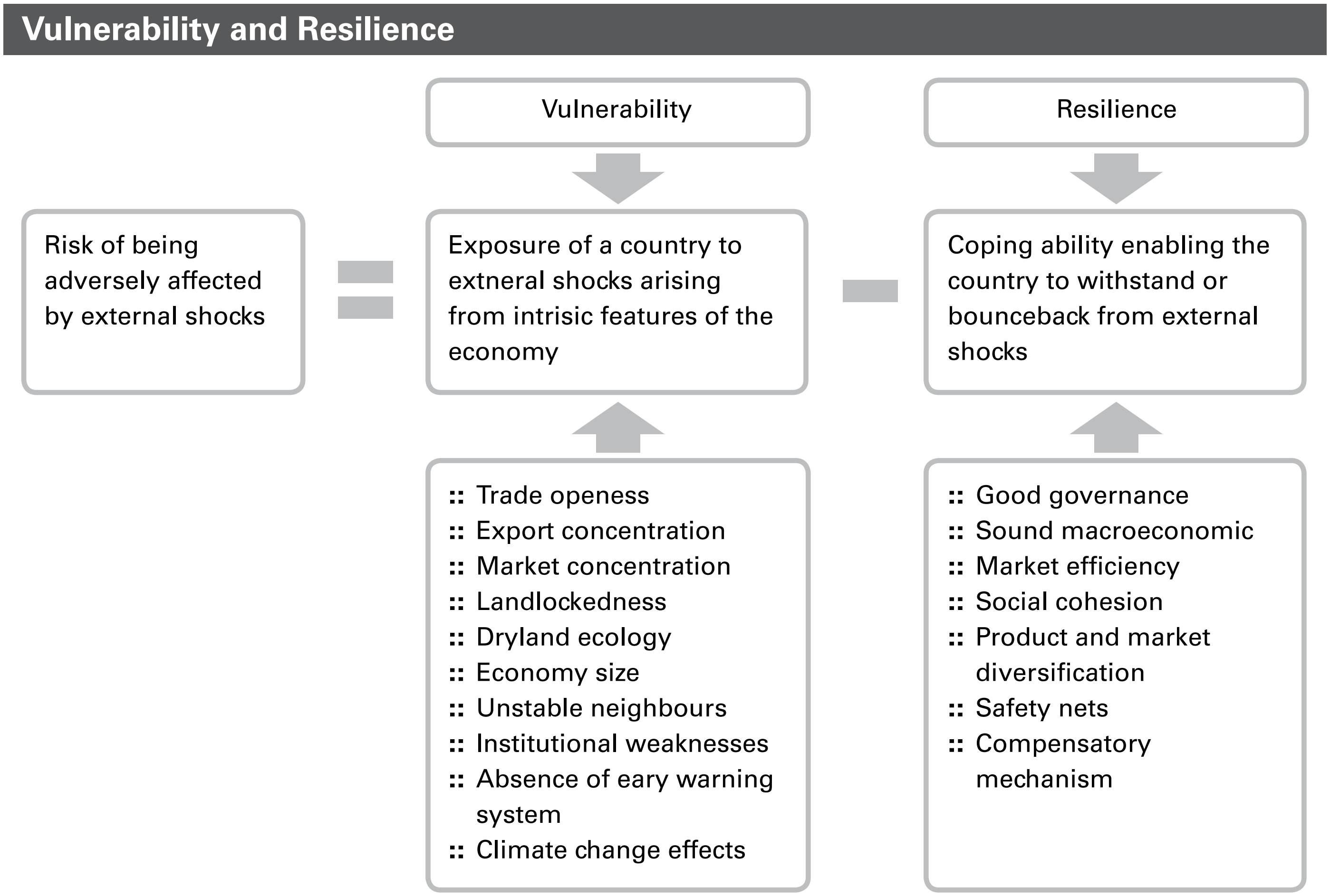
In Africa, instability has prevented progress in the development of various regional economic entities, and adequate harmonization of national regulations and procedures such as administrative and customs documents governing transit, high prices charged by operators, long transfer times, and information and communication technology. In its national report on the implementation of APoA, the Government of Burkina Faso reports that its bilateral agreement with Mali aimed at the joint upgrading of transit and border crossings has stalled due to the political crisis in Mali.

The nature, extent and timing of external shocks may create anxiety and nervousness among investors, especially if the ability of the state to adequately respond to, and address the ensuing challenges is doubtful. Endemic and cyclical shocks could create uncertainty, increase costs of doing business and erode profit margins. Repeated external shocks could also slow down the inflow of private investment, accelerate capital flight and general disinvestment. In brief, large systematic shocks reverse hard–earned economic and policy gains and engender frugality.

The most productive sectors in the LLDCs are subject to high volatility tied to commodity price fluctuations. Manufacturing, widely regarded as indicative of economic sophistication, has only accounted for a negligible share of the growth revival and total output in these countries. Very limited structural change has occurred, except in cases of transitions from one primary activity to another, as is the case of moving from low-productivity and self-subsistence agriculture to capital-intensive mining and oil sectors.

Figure 1 above shows that the risk of being adversely impacted by financial and external shocks is dependent on, first, a country's exposure to shocks arising from intrinsic features of the economy (vulnerability), and second, its ability to withstand or bounce back from external shocks (resilience). As discussed elsewhere, LLDCs have inherent and permanent conditions that make them vulnerable. As indicated elsewhere, LLDCs' exclusive dependency on other countries for international trade, geographical isolation from global markets, small and less diversified economies, dependence on a few agricultural crops and limited number of minerals, low productive

Figure 1: Vulnerability and resilience to financial and economic shocks



Source: Adapted from Briguglio et al. (2009).

capacity, terrain and ecological impediments (dryland and mountainous landscape), proximity to politically unstable neighbours and regions, dependence on foreign capital inflows (ODA, remittances, aid for trade, FDI etc.), insufficient domestic production of food and energy, and increasing economic openness – contribute to their vulnerability to external shocks.

While LLDCs are extremely vulnerable to external shocks, they also lack capacity to cope with them. LLDCs' resilience to shock is undermined by weak and underdeveloped institution and policy regimes, inadequate foreign reserve holdings, and high product and market concentration. Households are unable to cope with external shocks due to high unemployment, low saving capacity and higher poverty rates. The underdeveloped domestic market implies that these countries cannot stimulate domestic demand to compensate for decline in the foreign market demand. Other aspects as identified in Briguglio et al., (2009) include market inefficiency and social and political instability in a number of countries, such as Central African Republic, South Sudan, Mali and Afghanistan. This report focuses on three kinds of external shocks and their transmission mechanisms: financial and economic shocks; social and political-related shocks; and natural disaster and climate change-related shocks. In view of the vulnerability and resilience aspects discussed above, strategies to address these challenges in the LLDCs must be holistic and sufficiently comprehensive. As the next chapter will show, external shocks affect different countries differently, thus the need to avoid a more generalist, group approach.

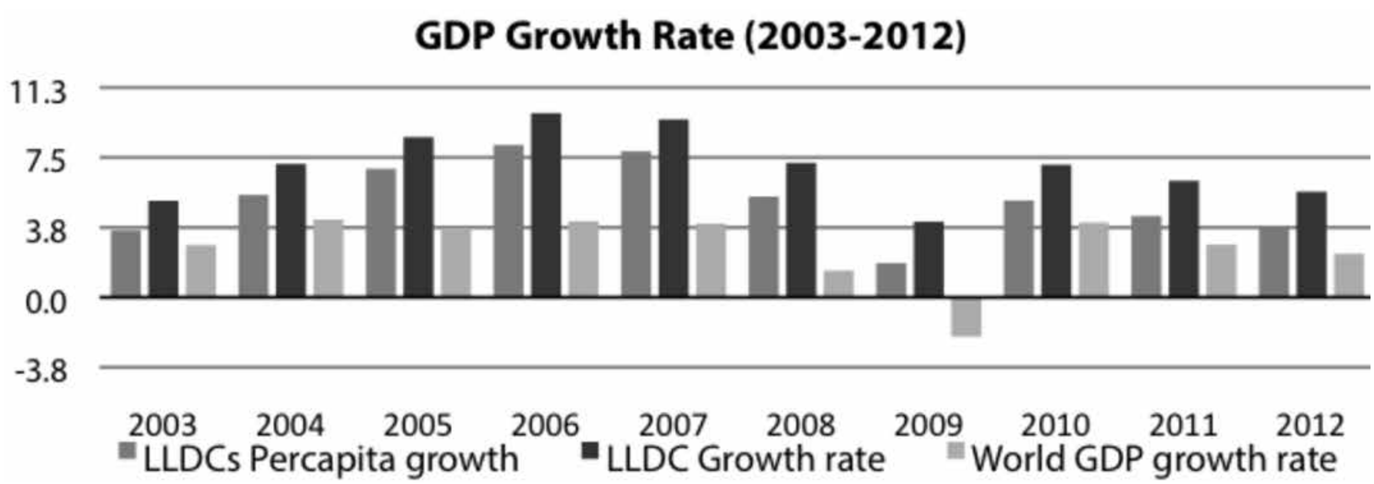
CHAPTER THREE

Economic and Financial Shocks

External shocks that grow out of economic and financial crisis are both severe and common. In an increasingly digital global economy, impacts from these crises travel rapidly, channeled through several pathways supported by globalization and deeper market and political integration. As shown below, financial and economic crises emanating from stronger, more advanced countries and emerging economies deal a devastating blow to weaker economies, including the LLDCs. This section explores some of the well-known economic and financial crises since the collapse of the Gold Exchange Standard of the Bretton Woods in the 1970s. While the impact of these crises on the LLDCs has not always been apparent, the goal here is to show the frequency of such events, and allow the reader to envision medium to long-term impacts of the volatility they create.

The current financial and economic crises that first appeared in the United States have been especially damaging to the economies of the LLDCs. As Figure 2 above shows, before the impact from the crises peaked, the annual GDP growth rate for the LLDCs was around 9.9 percent in 2006. At an average annual rate of 9.3 percent, economic output was particularly strong between 2005 and 2007. Per capita incomes rose strongly as well, averaging 7.6 percent over the same period. However, since 2008, annual GDP growth rate declined precipitously to about 4.1 percent in 2009. Per capita GDP growth slowed to just 1.8 percent. In terms of economic expansion rate, LLDCs are yet to recover to their pre-crisis pace. It is important to note here that landlocked developing countries have consistently performed better than the world average – before and during the crisis.

Figure 2: GDP growth rate for LLDCs



Source: The World Bank

LLDCs' fallout from external shocks was replicated across other major macroeconomic indicators. These indicators include exports and imports data, as well as capital and other financial inflows. Since 2007 recovery has remained shaky at best, and remains largely dependent on the recovery of the more advanced economies. This section discusses some of the possible channels through which external shocks are manifested. It begins by retracing some of the major financial crises that have impacted many developing countries, including the LLDCs, since 1970s.

3.1 A Review of Financial Shocks Since 1970s

It is fairly easy to identify momentous events that spawned significant external shocks in the past four decades. These events include: the discontinuation of the Bretton Wood monetary system; the back-to-back oil shocks of the 1970s; Structural Adjustment Programmes (SAPs) advocated by Western countries and promoted by the international Monetary Institutions (IFIs); the end of the Cold War; and the burst of the U.S. Housing bubble in 2007. While the extent of their impacts on LLDCs was dependent on country-specific attributes and conditions, there is hardly any country that remained unaffected. It is also important to note that the examples provided above are not conclusive. The goal here was to identify those that had greater implications, with a global reach.

The 1971 decision of the American authority to end the Bretton Woods system of fixed exchange rate or the "Gold Standard" was informed by the country's declining gold stocks, and its inability to maintain the value of the dollar. While transition to a free floating currency exchange regime, pegged against another currency (or a basket participating currencies) was relatively smooth, the collapse of the Bretton Wood system resulted in foreign-exchange markets that were suddenly much less stable than they had been over the previous three decades. This instability was further amplified by a continuous rise in the price of crude oil by OPEC countries aiming to build up their purchasing power.

The first oil-price shock went into effect in October of 1973 when OPEC countries declared an oil embargo which interrupted the flows of trade and capitals, exposing many LLDCs and non-oil producers to substantial external shocks. Countries that were more intertwined with, and exposed to economies of the developed countries plunged into economic recession and suffered steep rises in energy, commodities and food prices.

A combination of the financial implications of the 1973 oil-price shock, the collapse of the Bretton Wood system and the resultant US shocks contributed to the 1973-74 crash of all major stock markets around the world, and resultant stagflation. With the befit of hindsight, some have argued that the oil price shocks of the 1970s arose exogenously with respect to global macroeconomic conditions, but were propagated by the reaction of monetary policy makers, causing stagflation in the process. In other words, policy makers responded to the inflationary pressures caused by oil price shocks by raising interest rates, thereby causing a deep recession that would not have occurred without the central bank's intervention (Bernanke, Gertler and Watson (1997)).

The 1980s were years of relative stability and accelerated economic growth in the more advanced economies. The dominant neoliberal policies promoted globalization and increased integration of the world economy. In addition, this period coincided with the implementation of the Structural Adjustment Programs (SAPs) by the international financial institutions (IFIs). Analysts concur that SAPs created short to medium-term fiscal and social challenges that culminated in job losses, decline in manufacturing and production, and rise in poverty levels, especially among the most vulnerable groups. The foregoing notwithstanding, one of the major achievements of neoliberalism was the almost immediate massive cross-border financial transfers and faster growth in international trade. However, market volatility and economic disruptions would soon set in. In 1988-89, the Savings and Loans (S&L) crisis plunged the U.S. and global economies into a deep recession. Recovery and growth would soon resume, largely anchored on technology-led economic expansion.

The end of the Cold War, marked by the dismantling of the Berlin wall beginning in 1989, led to dramatically reduced military spending in Russia. The country began a series of economic reforms, transitioning from communism to capitalism. This path was not without challenges: the country suffered a financial crisis and a recession that considered being more severe than what the U.S. and Germany experienced during the Great Depression. The collapse of the USSR had serious implications to developing countries that had stronger political and economic ties with the bloc.

The U.S. housing bubble burst of 2007 unleashed devastating contagious effects that seriously undermined, the entire U.S. financial system, especially the banking institutions and investment funds that had substantial interest in mortgage-backed securities. Within months, other economies around the world with close ties with the U.S. economic and financial system would come under immense pressure. Impacts from this crisis were compounded by sharp increases in global food and energy prices. As the crisis unfolded, it created a credit crunch, a spiral fall in asset prices and demand. Major economies went into long, sometimes, double recessions characterized by mass layoffs and decline in government revenues. Commodity-intensive economies, along with open, emerging economies were especially hit the hardest. The shocks were manifested mostly in terms of trade for the former, and in the financial sector of the latter.

3.2 LLDCs and the 2007 Crises

The Impact of the 2007 Crises on the Landlocked Developing Countries: A Study by UN-OHRLLS

In the throes of the worst global economic and financial crises since the Great Depression, UN-OHRLLS commissioned a study that explored how landlocked developing countries were being impacted. Besides outlined all possible transmission channels, the study evaluated the nature of the LLDCs' vulnerabilities to the crises and the support response of relevant global and international institutions to the crises as well as policy options available at the country-level.

That report noted that diversity among the LLDCs meant that some countries would emerge from the crises better than others. It continued that while these countries could expect a drop in the rate of growth of output, a number of countries (a few) would still experience a moderate growth in 2009. However, the report warned that drop in output would be substantial and that without mitigation, the consequences for general welfare and continued investment in and maintenance of transport and related infrastructure could be quite negative in the short run, with potential long-term costs as well.

The study examined external support at the regional and global levels by reviewing the main support facilities ostensibly established to support countries through the crises. Many LLDCs were found to be eligible to benefit from these mechanisms. While noting the degree of consistency across international development institutions in the recognition of and attempts to address the shortfall in trade finance, the report indicated that major players, such as the World Bank, lacked a clear indication of the amount of concessional resources that could be, or were being mobilized to assist low-income countries, including LLDCs. Such uncertainty masked the extent and nature of future multilateral institution's support available to the majority of landlocked developing economies.

In terms of the capacity of individual countries to effectively respond to the crises, the paper cautioned that countries that majority of countries had not yet built up necessary preconditions, and that the group had greater need for external assistance since countercyclical policy, underpinned by external resource injection, was required to avoid further macroeconomic instability. In addition, the report noted that most landlocked developing countries could expect to be significantly affected by the crisis even though the degree to which the international community supported mitigation efforts remained "critical but frustratingly unclear".

How did LLDCs fare?

As noted elsewhere, the current financial and economic crisis led to sharp contractions in GDP and per capita GDP for landlocked developing countries. Annual growth rate fell sharply – from almost 10 percent in 2006 and 2007 to 4.1 percent in 2009. Between 2005 and 2007, GDP for 31 LLDCs expanded annually at an impressive average rate of 9.3 percent. Economic and financial difficulties created by the crises slowed down economic activities – to an average of 6.1 percent between 2008 and 2010. Economic performance of individual countries was varied with two-thirds of the LLDCs suffering drastic contractions.

Although economic growth in the LLDCs slowed to 4.1 percent in 2009, growth in the world economy was negative for the first time in over 15 years (-2.1 percent). Armenia, which had recorded an impressive 37.5 percent in the previous year, was hit the most, its economy shrinking by more than 14 percentage points. This economic decline was brought about, largely, by reductions in private consumption and public investments following external shocks in remittances and export earnings. Five countries with a strong export-oriented economy reported negative economic growth in 2009. These countries were Botswana, Macedonia, Moldova, Mongolia, Niger and Paraguay.

Examining three-year GDP averages that correspond to the period before and during the crises shows that one-third of the LLDCs experienced far worse contractions than the group's average of 34.4 percent. Transit developing countries contracted by 34.7 percent over the same period. Seven countries expanded faster during the crisis than they previously did. Countries that were hit particularly hard were; Zimbabwe, Botswana, Azerbaijan, Kazakhstan, Macedonia, Mongolia, Malawi, Moldova, Swaziland and Armenia. Those that posted stronger than expected growth during the crisis include Uzbekistan, Afghanistan, Zambia, Burundi, African Republic, Paraguay, Niger, Lesotho and Nepal. The foregoing shows that LLDCs that are also LDCs fared better than non-LDCs- underscoring the relatively deeper ties that exist between the latter group and some of the most advanced economies where the external shocks began. In light of external shocks, this experience underscores the need for the international community, in particular development partners and multilateral institutions, to strengthen support to all landlocked developing countries (LDCs and non-LDCs) for they clearly suffer inherent though somewhat different economic and development disadvantages.

Expressed as a share of GDP, trade volume is generally higher for LLDCs than global average as well as for transit developing countries. Between 2005 and 2007, trade was about 84.3 percent of the LLDCs' GDP, compared to 51.6 percent for transit developing countries, and 57.4 percent for the world. In the aftermath of the crises, it is evident that LLDCs have endured more devastation than other group of countries. For LLDCs, trade as a share of GDP declined 7 percent, to 78.3 percent between 2008 and 2010. By this measure, transit developing countries witnessed a modest 1.2 percent contraction, while global average fell 0.5 percent. Merchandise trade was highest in 2008, when it reached 72.8 percent of LLDCs' GDP. However, it soon suffered a 20 percent decline to 58.4 percent in 2009. Merchandise trade from transit developing countries declined 21 percent over the same period but reached a much lower peak of 51.9 percent in 2008. Exports of goods and services reached 44.8 percent of GDP in 2008, but fell 18.9 percentage points the following year. All landlocked developing countries suffered export declines – except Kyrgyzstan, Armenia, Niger, Turkmenistan and Burkina Faso. Rwanda, Botswana, Zimbabwe, Burundi, Kazakhstan, Macedonia, Azerbaijan and Bolivia experienced year-to-year contraction of over 20 percent between 2008 and 2009.

The crises spawned immediate downward pressure on the savings rate as well as investment. Worldwide capital formation that had been steadily rising levelled off at 23.0 percent of GDP in 2007 then began to decline. The full impact on the LLDCs and transit developing countries was delayed and somewhat short-lived: capital formation rate for the two groups of countries continued to rise until well after 2009. Both landlocked and transit developing countries have since bounced back to the pre-crisis levels. Access to short-term debt, multilateral and bilateral development assistance, and rebounding commodities markets contributed significantly in stabilizing LLDCs from external market perturbations. In terms of ODA per capita, LLDCs received about US$50.00 in 2008 when the global average was US$ 18.90, and US$ 7.70 for transit developing countries.

3.3 Transmission Mechanisms of Financial and Economic Shocks

3.3.1 Official Development Assistance

Counted among vulnerable countries, LLDCs receive substantial amount of official development assistance (ODA) from the international community. Aid flows underscore the commitment of external players to promote economic growth and development around the world. Foreign aid is an integral component of the international support measures, and is the underlying basis for the MDG 8. ODA is defined as aid receipts provided by official agencies, including state and local governments or by their executive agencies, with the promotion of the economic development and welfare of developing countries as its main objective; and that are concessional in character, comprising a grant element of at least 25 percent (calculated at a rate of discount of 10 percent).

From an economic standpoint, development assistance is promoted as a response to existing capital market imperfections, and the inability of poor countries to raise enough domestic resources through taxation and savings[11]. Investment in poor countries is undermined by the insufficient saving capacity of the private sector, in what is often referred to as the savings-investment gap. Majority of people in the poorest countries are preoccupied, on a daily basis, with meeting their subsistence needs. For developing countries, concessional external finance is, thus, essential to support a multi-year public investment program aimed at developing public capital in infrastructure and other sectors. In addition, it is argued that while profitable investment opportunities may exist in poor countries, information asymmetry, investor bias and other reasons often prevent the free-flow of external capital to these countries.

In times of economic downturn, foreign aid has proved to be especially important – to both low-income and advanced economies. For instance, official development assistance was crucial in stabilizing Mexico following its 1994-95 crises. The International Monetary Fund (1998) notes that during the East Asian financial crisis of 1997-98, multilateral and bilateral donors provided almost US$ 100 billion in loans and grants to the crisis-afflicted countries, including some of the Asian tigers. In particular, the IMF provided US$ 36 billion to support reform programs in the three worst-hit countries of Indonesia, Korea, and Thailand by early 1998.

The focus of foreign aid should also include the promotion of sound policies and the development of institutions Policy reforms that are not technically difficult, such as stabilization and trade liberalization, can add 2 to 3 percentage points to developing countries' annual growth rate (World Bank, 1998). But for this to occur, aid must be properly targeted at sectors that have the potential to contribute the most to accelerated growth in production and productivity, incomes, value addition, economic transformation, strong job creation and international trade. And to be most effective, sufficient aid resources should augment national assets, and efforts to address persistent structural roadblocks that inhibit the realization of sustainable, inclusive and equitable growth.

ODA is critical in meeting the development challenges faced by most of the landlocked developing countries, including geographical isolation, infrastructural development and access to the sea. LLDCs can benefit the most if and when adequate development assistance is aimed at promoting sustainable solutions to challenges that go beyond the narrow focus of access to the sea. Improvement in transit transport, and trade facilitation measures are often two common approaches to dealing with costs and disadvantages of being landlocked. But such measures are hardly enough to guarantee sustainable, equitable and inclusive economic growth. Foreign assistance can be targeted at supporting LLDCs in the development: the productive capacities; structural transformation; private sector; manufacturing and value addition; institutions; and as well as fostering a supportive policy environment. Of particular importance for the LLDCs, and in the context of international trade, are international support measures to sectors that will fast-track the production of goods and services that are less-bulky, of higher-value, and non-dependent on overland transportation.

ODA receipts to LLDC more than doubled in a little over ten years: from US$ 11.0 billion in 2000, to US$ 25.2 billion in 2010. In 2011, total ODA receipts declined by 3.23 percent, to stand at US$ 24.3 billion. The general decline in the global aid disbursement, in real terms between 2010 and 2011 was 2.7 percent. In addition, a number of LLDCs are recipient of humanitarian assistance – a component of ODA extended to countries experiencing natural and manmade disasters. The most distinguishing feature of humanitarian (also known as emergency) aid is that it is offered as a 100 percent grant. A number of LLDCs, such as Afghanistan, Burundi, Rwanda and Ethiopia are major recipients of emergency assistance. Other countries that have recently attracted substantial amounts of humanitarian assistance include Central African Republic (CAR) and Mali.

The Almaty Programme of Action (APoA) has been instrumental in galvanizing international support for landlocked developing countries. In constant 2011 dollars, net ODA disbursements to LLDCs increased from US$ 16.5 billion in 2003, to US$ 25.7 billion in 2011. While this is certainly commendable, LLDCs' share of total ODA commitments did increase marginally over the same period: from 16.9 percent to 18.2 percent. While APoA has been successful in accelerating aid disbursements to LLDCs, year-to-year economic growth rate in GDP has outpaced that of ODA. In other words, the aggregate share of ODA net disbursements as a percentage of the group's GNI has been steadily declining. At its peak in 2003, net aid disbursements were around 8.2 percent of the entire GNI of the LLDCs. For ten countries, net disbursements averaged more than 15 percent of their GNI (Afghanistan, Burundi, Ethiopia, Laos, Malawi, Mongolia, Niger, Rwanda, Uganda and Zambia). In 2011, the group-wide net disbursement was much lower, around 4.6 percent. In fact, only 4 countries, Afghanistan, Burundi, Malawi and Rwanda had an average of 15 percent or more.

Trade-related assistance, Aid-for-Trade, to the LLDCs is on the rise. Aid-for-Trade (AfT) is offered specifically to support developing countries' efforts to expand their trade as a tool for economic growth and poverty reduction. It supports the development of aspects such as: trade policy and regulation; trade development; trade-related infrastructure; productive capacity; trade-related adjustment such as balance of payment; and other trade-related needs. LLDCs' AfT receipts topped US$ 6.4 billion in 2011 which was a remarkable 70 percent real increase since 2005. A further analysis of this aid shows that most flows were directed towards economic infrastructure and productive capacity development. Assistance targeted towards transport and storage was roughly one-third of total AfT disbursements.

While still important, ODA has become, generally speaking, substantially less prominent in the development calculations for a number of LLDCs that are not LDCs. As a ratio of GNI, net ODA disbursement is less than 1 percent for Azerbaijan, Botswana, Kazakhstan, Paraguay, Turkmenistan and Uzbekistan. In absolute terms, net disbursement as a share of GNI declined by more than 10 percentage points between 2003 and 2011 for Laos, Mongolia and Zambia.

The most vulnerable LLDCs are those that are also LDCs, many of which exhibit aid-dependency. These countries have a higher-than-group average ODA receipts as a percentage of GNI, as a percentage of central government expenditure, and also as a percentage of gross capital formation. A high ODA – government expense value is indicative of the important role that ODA plays in the day-to-day functioning of the governments, while a high ODA-gross national formation ratio suggests low domestic resource mobilization, underscoring the role of ODA as an important source of development finance.

Governments that rely on external resources to fund part or most of their budgets remain extremely vulnerable to sudden decreases in aid inflow. The unpredictable nature of some aid, as well as the lag between commitment and disbursement present planning challenges to aid-dependent countries. According to available data, between 2003 and 2010, thirteen LLDCs relied on ODA to fund about 20 percent of the central government expenditure.

These countries were: Ethiopia, Afghanistan, Niger, Burkina Faso, Mali, Uganda, Lao PDR, Zambia, Kyrgyzstan, Bhutan, Nepal, Bolivia and Mongolia. It is important to emphasize that this is a partial picture, since data for other potentially aid-dependent countries is unavailable.

ODA-related Shocks

Aid dependency makes countries more vulnerable to external shocks. Volatility in aid flows and uncertainty regarding donor support can have significant fiscal and monetary implications to a country's development outcomes. A sudden withdrawal of or reduction in donor-provided funding often leads to undesirable consequences, such as delays in project completion, and/or complete abandonment of projects and programs. Many developing countries are replete with abandoned projects with zero economic value[12]. Even with the resumption of donor support, or in cases where alternative funding is secured, the eventual completion of such projects is almost always characterized by cost overruns. There are instances when alternative funding arrangement is not permitted, due to contractual obligations. Sudden cutback in aid flows can lead to the abandonment of critical reforms, compromise the ability of the governments to function as well as contain social unrest. Since much of development assistance is volatile, aid-related shocks remain a reality for many recipient countries.

Aid shocks can transform into economic shocks quite quickly. For example, a sudden drop in aid receipts could compromise the government's fiscal and human resource capacities which in turn may affect tax recovery efforts. Studies show aid shocks to be closely associated with a higher likelihood of armed conflicts. A recent study on foreign aid and armed conflict found a direct connection between changes in aid receipts and conflict. It concluded that, for aid recipients, sudden aid shortfalls make governments relatively less able to make enough side-payments or military investment to preserve the peaceful status quo in the future. Alluding to aid-related shocks, the paper recommended that donors deciding to remove aid should do so gradually, over time, because sudden large decreases could be deadly (Nielsen, et al. 2011). Indeed, in the past, a number of governments in Sub Saharan Africa have been overrun by rebel forces after they became incapable of guaranteeing a continuation of social and development projects previously funded by the development partners.

From Table 1 below, it can be observed that countries that show a high ODA percent as a share of the government budget also tend to manifest a high ODA-GNI percentage, as well as a high ODA-capital formation ratio. These constitute the most vulnerable countries to which aid plays a critically important role. This paper neither sets a threshold for a healthy dose of development assistance, nor discusses what constitutes good development assistance. However, in view of aid-related shocks discussed above, it is important for the international community to seek safety measures that would pre-empt or at least reduce damaging impact of aid-induced shocks.

The impact of the 2007 crises on the LLDCs can also be examined in the context of the quantity of ODA received, first in comparison to GNI, followed to capital formation and as a percentage of imports of goods, services and primary income. By all these measures, LLDCs have performed worse than transit countries as well as global averages. For instance, three-year averages that correspond to the pre and during the crisis period show that net ODA receipts as a share of GNI of the LLDCs to have declined by 16 percent, against a global decline of just 2 percent. Likewise, net ODA as a percentage of capital formation fell 24.4 percent against the global average of 0.9 percent. In fact, 22 of the 31 LLDCs manifest contraction since the crisis.

12 In his book, "Globalization and Its Discontents", Joseph Stiglitz, a former senior vice-president and chief economist with the World Bank warns that "when projects, whether agriculture or infrastructure, recommended by the west, designed with the advice of Western advisers, and financed by the World Bank or others have failed, unless there is some form of debt forgiveness, the poor people in the developing world still must repay the loans" (Stiglitz, J: 2003 p.8)

Table 1: Average Net ODA Received (2003-2011)

ODA % of GNI		ODA % Capital Formation		ODA % Public Expenditure	
Afghanistan	43.5	Afghanistan	229.5	Niger	146.0
Burundi	32.3	Burundi	207.1	Afghanistan	128.0
Rwanda	20.0	Zimbabwe	156.9	Ethiopia	115.1
Malawi	19.8	Rwanda	111.9	Burkina Faso	105.4
Ethiopia	14.1	CAR*	93.2	CAR*	89.5
Uganda	14.1	Malawi	88.8	Tajikistan	87.0
Niger	13.8	Niger	61.5	Mali	86.0
Mali	13.0	Ethiopia	60.5	Uganda	77.5
Zambia	12.8	Uganda	58.7	Lao PDR	73.2
Burkina Faso	12.7	Mali	56.9	Zambia	65.2
CAR*	10.1	Burkina Faso	55.3	Bhutan	51.5
Bhutan	9.8	Tajikistan	53.6	Kyrgyzstan	43.8
Lao PDR	9.8	Zambia	50.5	Nepal	34.3
Kyrgyzstan	9.4	Kyrgyzstan	48.0	Bolivia	29.5
Tajikistan	8.5	Bolivia	41.7	Mongolia	27.7
Zimbabwe	8.2	Nepal	39.1	Armenia	25.4
Mongolia	8.0	Lao PDR	37.6	Moldova	19.3
Chad	7.5	Lesotho	30.3	Lesotho	15.9
Lesotho	6.3	Chad	26.6	FYR Macedonia	9.4
Bolivia	6.1	Mongolia	21.8	Swaziland	8.8
Nepal	5.8	Moldova	21.4	Botswana	6.3
Moldova	5.4	Bhutan	19.7	Paraguay	4.6
Armenia	4.6	Swaziland	16.4	Azerbaijan	2.7
FYR Macedonia	3.1	Armenia	15.9	Kazakhstan	2.4
Swaziland	2.0	FYR Macedonia	13.8	Burundi*	
Botswana	1.6	Uzbekistan	4.8	Chad*	
Azerbaijan	1.4	Botswana	4.6	Malawi*	
Uzbekistan	1.0	Paraguay	3.8	Rwanda*	
Paraguay	0.7	Azerbaijan	3.4	Turkmenistan*	
Kazakhstan	0.4	Turkmenistan	1.3	Uzbekistan*	
Turkmenistan	0.3	Kazakhstan	1.3	Zimbabwe*	
LLDCs	**6.0**	**LLDCs**	**31.2**	**LLDCs**	**26.8**
World	**0.2**	**World**	**0.9**		

Source: The World Bank, * implies unavailable data; CAR* stands for Central African Republic.

The 2005 Paris Declaration and the 2011 Busan Declaration on aid effectiveness emphasized a number of key principles aimed at enhancing aid effectiveness. These principles include national ownership, aid alignment, aid harmonization, and aid predictability. Targets, such as making aid more predictable, strengthening local capacities and the use of results-oriented frameworks are key in addressing aid-related shocks.

3.3.2. External Debt

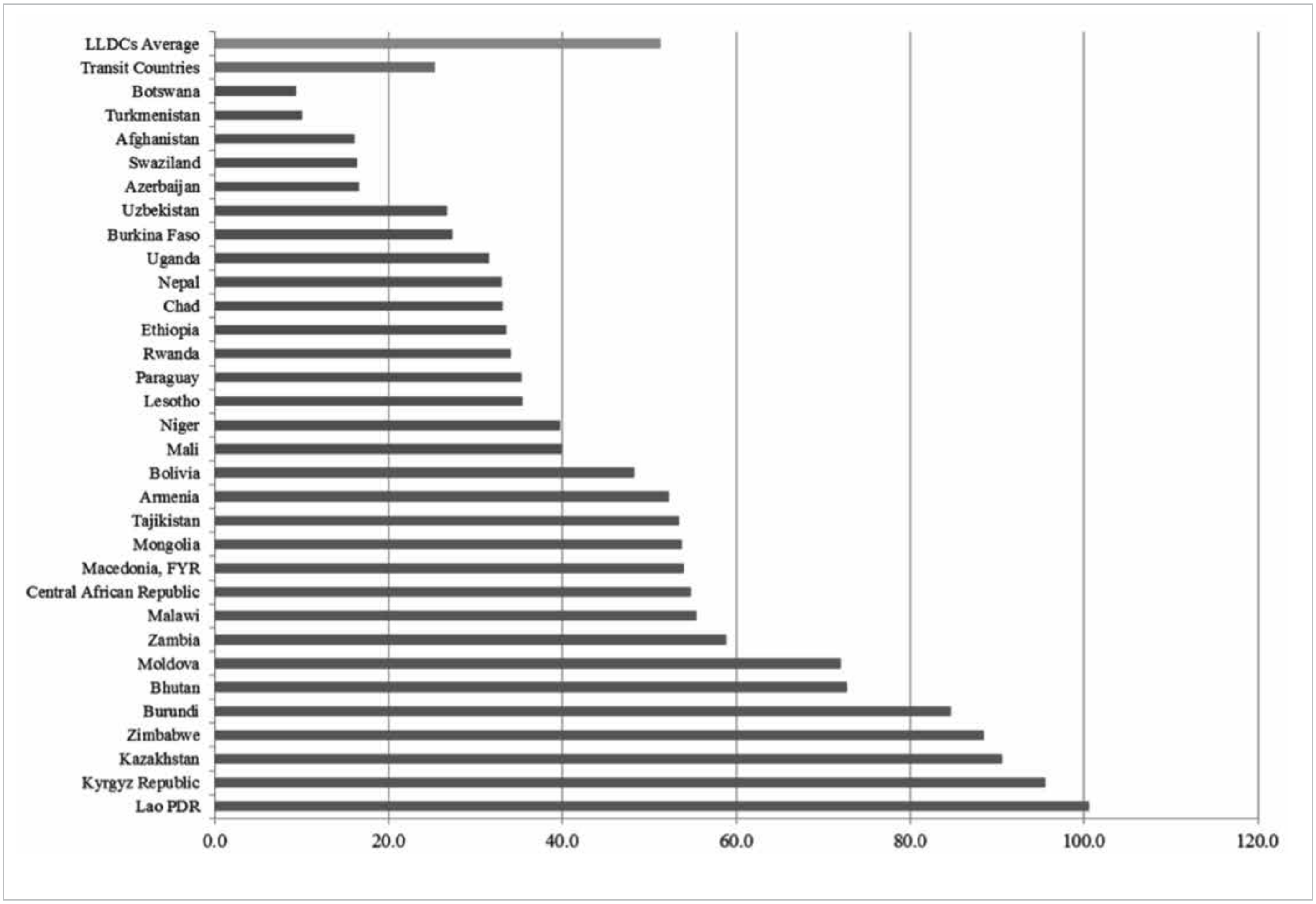
As a result of the Heavily Indebted Poor Countries (HIPC) Initiative, and the Multilateral Debt Relief Initiative (MDRI), the debt burden of LLDCs was substantially reduced in the last decade. External debt as a percentage of LLDCs' GNI declined from 73 percent in 2003, (the year APoA began) to 45 percent in 2011. Debt servicing ratios have also fallen in majority of LLDCs.

Twelve LLDCs have benefited from the two debt relief initiatives, and a number of countries are no longer eligible. As of 2012, eligible LLDCs had received US$ 20 billion in debt relief under the HIPC Initiative, with additional US$ 19 billion offered under MDRI. Debt relief under these initiatives has alleviated debt burdens in landlocked developing countries and freed up critical resources to fund other social and economic activities. However, as the HIPC initiative is nearly completed, it is important to extend some form of debt relief assistance to landlocked developing countries that are experiencing high debt burdens in order to prevent them from entering into unsustainable debt situations.

LLDCs' large external debt burden represents a development impediment that merits further consideration. While debt relief initiatives have yielded laudable results, there is a need to examine how external debt acts as a conduit for external shocks. External debt and debt repayment remains a heavy burden on the LLDCs. For the full term of APoA, the stock of external debt as a percentage of GNI has been 51.3 percent, compared to for just 25.3 percent for transit developing countries. 17 LLDCs have debt stock as a percentage of GNI at around 40, while it is over 90 percent for three countries (Laos, Kyrgyzstan and Kazakhstan. Many of these 17 LLDCs are ineligible to benefit from relief extended under HIPC arrangements. Data for individual countries is shown in Figure 3 below.

Of course, a high debt-GNI ratio may not necessarily imply difficulties; the ability of a country's to sustain the debt burden must be assessed at the country level. This notwithstanding, external debt burden is especially problematic to countries with low revenue mobilization capacity, and weak tax recovery mechanism. External debt that is denominated in foreign currencies, including the dollar and Euro, represents a significant challenge to resource-poor countries that have weak foreign exchange position. Volatility in the world market related to both commodity demand and prices impedes the ability of developing countries to service their debt denominated in foreign currencies. Sudden and persistent movements in the exchange rates further compromises the ability of LLDCs to service their outstanding debts, and access foreign capital on the global capital markets. As mentioned in the context of the 2007 financial and economic crisis, fiscal and monetary policies pursued by advanced economies have created global financial imbalance in which private capital is concentrated in a handful of countries.

Figure 3: External debt stock as percentage of GNI (2003-2012)



Source: The World Bank

A consideration of external debt (and debt service) as a percentage of exports volumes comprising of both goods and services can also help identify LLDCs that are at greater risk to external debt-related shocks. In 2011, total debt service as a share of exports of goods, services and primary income for 17 LLDCs, where data was available, was 20.7 percent. The seven-year average for this group of countries was 22.8 percent. Indicative of their limited ability to service foreign-currency dominated debt, debt-service as a share of export earnings for half of those countries was less than 5 percent.

Table 2: 2011 Debt Service, % Exports of Goods, Services & Primary Income

Country	Percentage
Kazakhstan	34.6
Armenia	25.4
Macedonia	18.9
Moldova	12.8
Kyrgyzstan	11.8
Bhutan	11.1
Nepal	9.5
Ethiopia	6.1
Bolivia	4.9
Azerbaijan	4.9
...	...
Paraguay	3.6
Burundi	3.4
Zambia	2.1
Mongolia	2.1
Swaziland	1.9
Uganda	1.7
Malawi	1.3
Landlocked developing countries (Average)	**20.7**

Source: International Monetary Fund

For many of these countries, external debt repayment is dependent on the mobilization of domestic resource as well as foreign capital, including official development assistance. If development partners experiencing economic recessions reduce their aid commitments, this would further impede the ability of an aid-dependent LLDC to service its external debt. One possible long term implications of such cascading events is that a country could be unable to access credit on the international markets, thereby stalling its growth prospects.

It is important to once again refocus on the external debt burden and its ability to propagate external shocks. It is strongly recommend that LLDCs receive some form of debt relief assistance – especially those with high debt burdens – to prevent them from entering into unsustainable debt situations. The deepening of knowledge on how debt amplifies the impact of external shocks should, hopefully, trigger appropriate responses that could soften their impact.

3.3.3 External Trade

Trade-to-GDP ratio is a measure of a country's "openness", or the level of its integration in the world economy. Defined as the sum of exports and imports divided by GDP, this indicator estimates the degree of dependence of domestic producers on foreign markets as well as their trade orientation. It also measures the degree of reliance of domestic demand on foreign supply of goods and services, where goods consist of merchandise imports and exports, while services include transport, travel, communications, construction, ICTs, financial and government services among others. Trade openness is often expressed in current prices and current exchange rates.

Besides domestic trade policies, trade openness is largely influenced by trade facilitation measures such as the multilateral trade negotiations as well as exogenous macroeconomic factors, such as the state of the world economy. The level of trade openness is dependent on the structure of the economy, re-exports and the presence of multinational corporations. A low trade-to-GDP ratio does not necessarily imply the presence of high obstacles to foreign trade, such as tariff and non-tariff measures. Neither is it indicative of other distortionary policies. For most of the vulnerable countries such as the LLDCs, SIDS and LDCs, trade openness is often affected by economy and population sizes along with geographic remoteness from key markets.

Imports and exports play a relatively larger role for developing countries than for advanced economies, since the later tend to be fairly self-sufficient, and manifest well-developed internal demand and supply markets. In addition, countries surrounded by relatively open trade regimes manifest a higher trade-to-GDP ratio. Against this backdrop, international trade is especially important to countries such as LLDCs, even when they are likely to manifest lower trade-to-GDP ratio due to distances that exist between many of them and countries with more open trade regimes.

In nominal terms, the value of merchandise exports from the LLDCs increased rapidly, from US$ 33.9 billion at the start of the new millennium, to a record US$ 227.8 billion in 2013. Merchandise exports have increased in value five-fold, since 2003, when APoA first went into effect. While this is encouraging, the share of LLDCs in the global merchandise trade increased minimally, from 0.6 percent in 2003 to 1.2 percent in 2013. To underscore the untapped trade potential of the LLDCs in this area, transit developing countries increased their share from 12.5 percent to 21.5 percent over the same period. In addition, while transit developing countries seem to have suffered minimal impact from the 2007 financial and economic crisis, at least in terms of merchandise trade, LLDCs share suffered real contractions, from 1.11 percent in 2008 to 1.0 percent in 2009. On year-to-year basis, LLDCs suffered a 30 percent decline in 2009. In fact, with the exception of Ethiopia, Zimbabwe, Uzbekistan, Niger, Burkina Faso and Malawi, all countries reported negative growth in the value of merchandise exports. Turkmenistan and Kazakhstan suffered the most contraction, in the order of 58.1 percent and 39.3 percent, respectively.

Trade theorists promote trade liberalization as an important dimension to economic growth and development. Trade liberalization, or openness to trade, is seen as having a positive impact on economic growth by facilitating technology spillovers and foreign direct investment, which, in turn, promote productivity, international competitiveness, and export revenues. International trade, which is the aim of trade liberalization, is known to improve resource allocation, drive efficiency, lead to welfare gains in the form of lower prices for consumers.

Countries that are closely integrated with the global economies are best suited to access foreign markets, and command better prices for their goods and services. Such countries are also able to promote productivity and growth in incomes through the acquisition and deployment of appropriate technologies. There is ample evidence to support the foregoing. For instance, countries that were previously closed have grown faster once they pursued policies consistent with trade openness. Such policies promote the free flow of goods and services across borders. They also facilitate the easier and faster transfer of capital, labour, information, ideas, and technology from one country to another. Globalization, improvement in transportation and communication sectors has made possible, the discovery and pursuit of opportunities at global level.

Since the 1980s, at least three reasons have contributed to growing trade openness around the world. First, trade liberalization became a significant development strategy after import substitution failed to deliver the outcomes many societies aspired for. Secondly, there is strong evidence that countries develop faster when they pursue an open trade regime. Empirical studies have established a strong positive relationship between trade openness and economic growth. Finally, many developing countries pursued trade liberalization as part of the reform package recommended by the international financial institutions (IFIs) – namely the World Bank and IMF.

Trade liberalization is not without its shortfalls: there is a growing body of empirical work that shows "destabilizing effects" of trade openness if it is not pursued with strong strategic policy objectives. Although initial work in this realm suggested that trade-induced instability was transmitted and felt as terms of trade shocks, it is now recognized that open economies have relatively greater volatility and, in some cases, greater consumption volatility as well (Loayza et al., 2007). Due to a number of factors, developing countries suffer larger volatility effects than the more developed economies. Landlocked developing countries, like other developing countries, tend to have weaker financial systems, undiversified commodities-dependent export market, and unstable fiscal and monetary policies. Most of LLDCs are resource poor, and net importers of food and energy, two commodities that manifest greater price volatility. Impacts from trade-related shocks are amplified by weaker resilience and other coping abilities.

Developing countries on the path to seek trade openness may suffer greater instability than developed economies because of one or a combination of the following factors.

a) There exists asymmetry between increasing specialization forces underwritten by the export markets, and random shocks in the export markets.
b) Commodity prices are often more volatile than for manufactured goods.
c) Inconsistency between new trade-related shocks, and traditional coping mechanisms and capacities.
d) Trade liberalization affects the government's abilities to operate price stabilization policies.
e) Trade reforms may cause a change among different activities and tastes of the households. Such policies may lead to changes in consumption patterns, and make families switch from subsistence farming to the cultivation of cash crops.

Unreliable, inadequate and costly transit transport together with cumbersome border crossings constitutes major roadblocks that impede LLDCs' fuller and competitive participation in international trade. Of course, this is in addition to other structural constraints that spawn internal shocks, inefficiencies and underperformance. Considered together, these conditions limit growth, weaken resilience, and/or even exacerbate the impact of external shocks. To underscore the weaknesses and vulnerability of the LLDCs to trade-related shocks, we briefly review country-level trade-to-GDP ratios, balance of payment, and international reserves.

Trade to GDP ratio

Indicative of possible group-wide fallout from the latest global financial and economic crisis, four-year average trade-to-GDP ratio for the LLDCs declined from 45.0 (2004-2007) to 43.5 (2008-2011)[13]. Several possible explanations exist. Since the ratio is sensitive to price and demand volatility in the global markets, this decline reflects substantial decline in world demand and/or prices for commodities from the LLDCs. Alternatively, this ratio may also reflect strengthening of local markets through government stimuli programmes that were pursued by a number of countries. Either way, declining fortunes on the global market relative to domestic market would lead to such a change.

As can be noted from Table 3 below, imports and exports represent significant proportion to the LLDC economies than for the other four groups shown. However, LLDCs are yet to recover from the crisis, given that trade-to-GDP ratio has declined by 3.4 percent. At the same time, foreign trade has become even more important to developed as well as least developed economies. Trade-to-GDP ratio for the world has increased 5 percent since 2004-2007.

13 Note: this and other figures in this section are derived from trade-related data available as UNCTADStat.

Table 3: Trade-to-GDP Ratio for Select Groups of Countries

Trade-to-GDP Ratios for Select Groups			
	2004-2007	2008-2011	% Change
Developed Economies	24.1	26.0	7.9%
LDCs	36.4	38.5	5.8%
Africa	39.7	40.0	4.9%
World	28.8	30.2	0.8%
LLDCs	**45.0**	**43.5**	**-3.3%**

Source: UNCTAD

A number of important observations regarding LLDCs can be made from the trade-to-ratio Table 4 below. First, foreign trade is a crucial GDP contributor in the smaller LLDCs of Lesotho, Swaziland and Bhutan. In these countries, trade-to-GDP ratio for the period 2008-2011 averaged 68.5, 68.4 and 46.8 respectively. However, the smallness of the countries may not necessarily be a paramount factor, given the low ratio for other small LLDCs such as Burundi, Central Africa and Laos. These three countries had a ratio of 15.3, 15.9 and 25.1 respectively over the same period. Second, trade-to-GDP ratio is dependent on the economic status of the transit and/or neighbouring countries. LLDCs with close proximity to South Africa, China and Russia manifest a higher-than-average ratio.

This observation is not entirely surprising since these emerging markets are also the most important trading partners for the LLDCs in the region. This aspect could explain, perhaps, why landlocked developing countries in East Africa (Burundi, Ethiopia, Rwanda, Uganda and South Sudan) manifest the lowest trade-to-GDP ratios. Third, the ratio is dependent on the value of the predominant export commodities. The ratio is higher for mineral-exporting countries than those than sell low-value merchandise such as agricultural produce. Besides demand and price volatility tied to foreign markets, agricultural economies face continuous pressures from extreme weather, including droughts and floods.

The last column shows the percentage change in the trade-to-GDP ratios, following the 2007/8 global financial and economic crisis. Two groups are clearly discernible; those that have experienced positive change, and those that haven't. Burkina Faso, Niger and Uganda are foremost among the first group whereas Tajikistan, Armenia and Chad headline the second group. While positive change among a number of countries signals strong export and import recovery, there is a need to provide more support to the LLDCs to accelerate recovery for more than 15 countries that experienced negative change.

Strongest Performers in descending order are: Burkina Faso; Niger; Uganda; Kyrgyzstan; Zimbabwe; Lao PDR; Zambia; Bhutan; Rwanda; Malawi; Ethiopia; Bolivia; and Macedonia. Countries that were hit the worst, and show slower recovery include: Tajikistan; Armenia; Chad; Botswana; Nepal; Azerbaijan; Moldova; Central African Republic; Swaziland; Burundi; Kazakhstan; Lesotho; Paraguay; Mongolia; and Mali. Countries with limited or unavailable data are Afghanistan, South Sudan, Turkmenistan and Uzbekistan.

3.3.4 The Balance of Payment

Balance of payments, otherwise known as the balance of international payments, is a summary of the economic transactions of a country (or economy) with the rest of the world at a specific time period. It provides a summary of a country's financial claims on, and liabilities to the rest of the world as a result of economic transactions by residents and nonresidents. It encompasses the creation, transfer, exchange and consumption of goods and/or financial assets, services, labour, capital and gifts. Balance of payments has current account, which includes

Table 4: Trade to GDP ratio for LLDCs

2004-2007		2008-2011		Percentage Change	
Chad	83.0	Lesotho	68.5	Burkina Faso	46.3
Swaziland	78.1	Swaziland	68.4	Niger	38.6
Lesotho	77.0	Chad	66.0	Uganda	32.7
Azerbaijan	75.7	Azerbaijan	61.7	Kyrgyzstan	23.2
Mongolia	62.0	Mongolia	61.4	Zimbabwe	15.4
Tajikistan	61.8	Kyrgyzstan	56.1	Lao PDR	15.0
Kazakhstan	59.6	Kazakhstan	52.9	Zambia	8.4
Paraguay	49.1	Paraguay	48.6	Bhutan	8.4
Moldova	48.6	Bhutan	46.8	Rwanda	8.1
Botswana	48.4	Macedonia	46.6	Malawi	6.7
Kyrgyzstan	45.5	Zimbabwe	45.6	Ethiopia	6.5
Macedonia	44.8	Zambia	45.6	Bolivia	6.3
Bhutan	43.2	Moldova	41.0	Macedonia	3.9
Zambia	42.0	Bolivia	39.8	Mali	-0.1
Zimbabwe	39.5	Botswana	38.5	Mongolia	-1.0
Bolivia	37.4	Mali	32.5	Paraguay	-1.1
Mali	32.5	Niger	32.4	Lesotho	-11.0
Armenia	27.8	Uzbekistan	31.7	Kazakhstan	-11.2
Malawi	26.3	Malawi	28.1	Burundi	-12.4
Niger	23.4	Afghanistan	26.1	Swaziland	-12.4
Lao PDR	21.8	Tajikistan	25.7	CAR	-14.3
CAR	18.5	Lao PDR	25.1	Moldova	-15.5
Burundi	17.5	Burkina Faso	23.7	Azerbaijan	-18.5
Uganda	17.3	Uganda	22.9	Nepal	-20.4
Burkina Faso	16.2	Armenia	21.6	Botswana	-20.4
Ethiopia	16.0	Ethiopia	17.0	Chad	-20.5
Nepal	15.5	CAR	15.9	Armenia	-22.3
Rwanda	14.4	Rwanda	15.6	Tajikistan	-58.3
Afghanistan*		Burundi	15.3	Afghanistan*	
Turkmenistan*		Nepal	12.3	Turkmenistan*	
Uzbekistan*		Turkmenistan*		Uzbekistan*	

transactions in goods, services, investment income and current transfers, and capital account that mainly deals with transactions in financial instruments.

Noting that balance of payments and international investment position data are most important for national and international policy formulation, the IMF offers a comprehensive list of balance of payments uses. External aspects, such as payment imbalances, and inward and outward foreign investment play a leading role in economic and other policy decisions in the increasingly interdependent world economy. In particular, such data are also used for analytical studies, regarding;

a) Determining the causes of payment imbalances and the necessity for implementing adjustment measures;

b) Studying relationships between merchandise trade and direct investment;

c) Understanding aspects of international trade in services;

d) In international banking flows and stocks;

e) In asset securitization and principal market developments;

f) Addressing external debt problems, income payments, and growth; and links between exchange rates and current account and financial account flows.

g) Used along with other variables for balance of payments projections and underscoring the relationship of these projections to changes in countries' stocks of external assets and liabilities.

h) Data constitute an indispensable link in the compilation of data for various components of the national accounts (e.g., production accounts, income accounts, capital and financial accounts, and the related measurement of national wealth).

The effects of external shocks show up almost immediately in the balance of payments, and/or the exchange rates – depending on the exchange rate regime. Unfavourable shocks precipitate deficits in balance of payments. Under a flexible, free-floating exchange rate regime, a balance of payments deficit leads to depreciation in the exchange rate. In order to finance a balance of payments deficit, countries may run down their domestically held international reserves, undertake international borrowing, or pursue adjustment policies. However, the current crisis has shown that the three options are not always available for developing countries such as the LLDCs. In addition, adjustment policies may even make a bad situation worse. The underdeveloped financial systems and perceived large uncertainty/risks in a number of the LLDCs inhibit the effective deployment of a monetary policy to trigger an inflow of foreign capital to offset the current account deficits. This being the case, LLDCs are then left to rely on worker remittances and official development assistance in plugging the deficit.

Table 5 below shows the net current account values of the balance of payments as a percentage of GDP. Two-year averages have been computed to show the impact of the 2007/08 financial crisis on the BoPs, and recovery thereof. It is clear that the BoP for all major groups of countries were negatively impacted. While this impact showed up almost immediately, and everywhere, as reductions in the balance of payments at the peak of the crisis (2007-2008), LLDCs show a lag. BoP surpluses increased even during the 2007-2008 period–and only to decline the following period (2009/2010). While developing economies saw a more than 50 percent reduction in their BoPs, they didn't go into negative. In other words, developing countries in general, and LLDCs in particular receive relatively small foreign capital, including FDI and ODA when compared to their economies. The challenge, going forward, is to accelerate the inflow of vital resources to spur growth.

Table 5: Balance of Payments for Select Group of Countries

Balance of Payments, Current Account Net (Percentage of GDP)				
	2005/06	**2007/08**	**2009/10**	**2011/12**
Developing Economies	4.8	4.7	2.2	1.8
Developed Economies	-1.6	-1.5	-0.5	-0.6
Least Developed Countries (LDCs)	-1.1	-1.4	-3.7	-2.3
Small island Developing States (SIDS)	1.7	0.7	-1.9	-4.3
Heavily Indebted Poor Countries (IMF)	-5.2	-6.4	-6	-6.7
LLDCs	**0.4**	**1.9**	**-0.7**	**2.3**

Source: UNCTAD

Table 6: Balance of Payments for LLDCs

Balance of Payments (Current Account, Net) Percentage of GDP				
	2005/06	**2007/08****	**2009/10**	**2011/12**
Afghanistan	1.0	-5.0	-15.6	3.1
Armenia	-1.4	-9.1	-15.3	-10.9
Azerbaijan	9.5	30.5	25.7	24.7
Bhutan	-18.8	4.9	-5.3	-21.8
Bolivia	9.0	12.0	4.6	5.0
Botswana	16.3	11.4	-3.7	-1.2
Burkina Faso	-10.5	-9.9	-3.3	-4.8
Burundi	-5.5	-12.1	-11.7	-11.2
Central African Republic	-4.8	-8.1	-9.7	-6.9
Chad	-4.0	-12.2	-4.3	-2.7
Ethiopia	-12.3	-5.6	-4.6	-4.3
Kazakhstan	-2.2	-1.6	-1.3	5.2
Kyrgyzstan	-5.8	-9.8	-4.3	-15.7
Lao PDR	-2.1	2.4	-0.3	-2.5
Lesotho	2.3	7.5	-11.6	-17.9
Malawi	-14.1	-14.0	-14.1	-8.0
Mali	-5.8	-10.2	-10.0	-9.0
Mongolia	4.9	-4.1	-10.9	-32.8
Nepal	1.8	3.2	-0.3	2.4
Niger	-8.9	-10.1	-22.3	-23.3
Paraguay	0.8	-0.2	1.5	0.9
Moldova	-9.4	-15.7	-8.0	-9.1
Rwanda	-3.9	-4.6	-7.3	-9.1
Swaziland	-5.3	-4.9	-11.5	-1.8
Tajikistan	-0.8	-6.2	-9.7	-7.0
Macedonia	-1.5	-10.0	-4.4	-3.5
Turkmenistan	13.6	19.2	-13.9	2.0
Uganda	-1.9	-6.6	-8.4	-10.3
Uzbekistan	11.1	7.8	4.6	6.5
Zambia	-3.5	-6.6	6.0	1.8
Zimbabwe	-11.2	-21.6	-12.3	-15.2

Source: UNCTAD (** Reflects the period when the global financial and economic crisis peaked).

Table 6 presents country-specific BoP positions. It can be noted that BoPs have remained relatively strong for Azerbaijan, Uzbekistan, Bolivia, Nepal and Turkmenistan. In general, however, a typical LLDC manifests significantly large BoP deficit, for they are net borrowers. This has significant policy implications. Persistent deficits require measures to slow down and reverse the deficit at some point in the future. This is, typically undertaken through a combination of increased savings (private and/or public), a depreciation of the real effective exchange rate and, probably a revaluation of external liabilities. For countries with underdeveloped financial markets, such as the LLDCs, high current account deficits may also indicate a greater exposure to future sudden reversal of international financial flows. Such events could and would undermine efforts to attain sustainable growth and development. The abrupt withdrawal of foreign capital would typically depend on how the deficit is being financed, macroeconomic conditions as well as international capital market sentiments.

The 2011/12 column shows a growing BoP deficit for countries such as Mongolia, Niger, Zimbabwe and Bhutan. A closer examination of the FDI inflows would suggest that most of the key beneficiaries are mineral reach countries. The vast majority of inward investments in this group continued to be in the form of Greenfield investments (UNCTAD, 2013b). In Mongolia, inflows more than doubled from 2010 to 2011 because of large scale projects in extractive industries. The table below shows that only LLDCs posted a positive net current account balance in 2010 through 2012. This, again, underscores the fact that LLDCs receive relatively less capital and other financial inflows from other countries.

Table 7: Balance of Payments: Net Current Accounts

Balance of Payments: Net Current Accounts: US$ at Current Prices (in millions)						
	2007	**2008**	**2009**	**2010**	**2011**	**2012**
Developing Countries	-529709	-668243	-227305	-202238	-262946	-225196
Sub-Saharan Africa	489	-8419	-33039	-15138	-17029	-38642
LDCs	-2137	-12826	-28884	-12761	-10854	-22922
SIDS	-616	2030	-2713	-263	-2977	-5790
HIPC	-19600	-27420	-25058	-23854	-26032	-3920
LLDCs	**2431**	**14441**	**-8375**	**2852**	**20362**	**8386**

Source: UNCTAD

3.3.5 International Reserves

International reserves of a country are a key determinant of how such a country responds to certain exogenous shocks, especially those related to exchange rate volatility. Table 8 below affords a comparison between the international reserves standing of the LLDCs with those of other groups. LLDCs, as a group, rapidly increased their holding of international reserves from US$ 81 billion in 2007 to over US$ 135 billion in 2012. While impressive, the 69 percent increase is well below the LDCs – a group that realized an 80 percent increase over the same period. On the other hand, the SIDS increased their international reserves holding by 54 percent, to US$ 25.3 billion.

Table 8: International Reserves for Select Groups of Countries

International Reserves: Million US$ (current prices)						
	2007	**2008**	**2009**	**2010**	**2011**	**2012**
LDCs	61474	71722	79651	88534	95772	110652
SIDS	16452	18638	21131	23391	25770	25283
LLDCs	81352	93294	105772	115636	129178	135671
International Reserves: Number of Months of Imports						
	2007	**2008**	**2009**	**2010**	**2011**	**2012**
World	5.8	5.5	8.2	7.6	7.0	7.5
DCs	2.3	2.2	3.4	3.2	3.1	3.4
LDCs	6.0	5.3	6.3	6.3	5.6	6.0
SIDS	5.7	5.4	8.2	8.6	7.6	7.2
LLDCs	**8.3**	**7.3**	**9.7**	**9.3**	**8.4**	**8.0**

Source: UNCTAD

Since international reserves can potentially finance imports, expressing such holdings in terms of the number of months of imports is a useful means that allows for comparisons. The number of months of imports depends on the import patterns of a country. Using this measure, it can be observed that LLDCs have, on average, sufficient international reserves to cover 8-months worth of imports. The 2012 average for the world was 7.5 months; 6.0 months for LDCs; and 3.4 months for developed countries. Obviously this is commendable, even though it simply reflect their remoteness and isolation from the world markets. In addition, as net importers of food and energy, it is expected that the LLDCs will manifest reserves-to-months of imports ratio. But a closer, country-level analysis (Table 9) is necessary to identify the most vulnerable economies.

The above figures for the LLDC group are heavily skewed by a few countries. For instance, while LLDCs' international reserves holdings manifest a group average that is greater than the world in terms of the number of months of imports, in 2012 there are only seven countries that actually exceeded the global average. These countries were: Turkmenistan; Uzbekistan; Bolivia; Azerbaijan; Afghanistan; Botswana; and Bhutan. As it can be seen from the table below, fourteen countries had reserves that could only cover less than five-month worth of imports. Sixty-eight (68) percent of actual reserves are held by just six LLDCs: Kazakhstan, Turkmenistan, Uzbekistan, Bolivia and Botswana. In order to estimate relative, country-specific abilities to use international reserves to absorb external shocks this data needs to be interrogated further, to include structural, population and other country-specific nuances.

Table 9: International Reserves for the LLDCs

International Reserves for LLDCs				
	Months of Imports		Current US$ (Millions)	
	2011	2012	2011	2012
Afghanistan	10.0	11.7	5,306	6,020
Armenia	5.6	5.1	1,932	1,799
Azerbaijan	12.1	13.1	10,274	11,277
Bhutan	9.0	9.8	790	830
Bolivia	15.6	17.4	9,984	11,733
Botswana	13.3	11.4	8,082	7,628
Burkina Faso	4.8	3.9	957	1,025
Burundi	4.7	4.7	294	307
Central African Rep	6.0	5.9	155	158
Chad	4.3	5.0	968	1,076
Ethiopia	4.2	3.2	3,100	3,169
Kazakhstan	8.2	6.0	25,321	22,331
Kyrgyzstan	4.8	4.3	1,707	1,908
Lao PDR	3.8	3.4	757	771
Lesotho	4.6	4.7	955	1,023
Malawi	1.0	1.1	198	224
Mali	4.9	5.5	1,379	1,341
Mongolia	4.1	7.0	2,281	3,937
Nepal	7.5	..	3,631	..
Niger	3.0	4.2	673	1,015
Paraguay	4.8	4.8	4,951	4,571
Moldova	4.5	5.8	1,965	2,511
Rwanda	7.1	6.2	1,050	1,035
Swaziland	3.7	4.6	601	741
Tajikistan	1.1	1.0	297	309
Macedonia	4.0	4.7	2,343	2,540
Turkmenistan	30.7	25.0	18,903	20,201
Uganda	5.6	6.4	2,617	3,169
Uzbekistan	18.1	17.6	15,000	16,000
Zambia	3.9	4.6	2,324	3,042
Zimbabwe	1.0	1.0	383	350

Source: UNCTAD

3.3.6 Migrant Workers' Remittances

Migrant remittances, which are largely person-to-person payments, differ from other forms of capital flows in a number of different ways. Since they are often transactions among members of the same households, they are devoid of profit-seeking motives. Secondly, they are often immune to the changes in the priorities of development partners. Thirdly, they are countercyclical – rising during periods of financial crisis, natural disasters and political conflicts. In Africa, remittances have been found to be more stable than FDI, private debt, and equity flows (Lueth and Ruiz-Arranz 2008). Remittances are an important source of finance and foreign exchange, especially for low income countries. Remittance inflows can improve sovereign creditworthiness by increasing the level and stability of foreign exchange receipts. They also help stabilize the current account by reducing capital flow volatility.

At the household level, remittances alleviate poverty and supplement incomes. They augment incomes and stabilize consumption patterns by filling occasional shortfalls in revenue. Since remittances are spent entirely on the family budget items such as food and housing, they have a direct impact on family welfare and the standard of living. In addition, remittances improve productivity and human capital when they support education and health outcomes of a family. Migrants' remittances also contribute to physical capital accumulation, as well access to a greater pool of knowledge, and technology.

Econometric analyses suggest that remittances contribute to poverty reduction. For instance, a 10 percent increase in remittance as a share of GDP was found to lead to a 2.9 percent decline in the share of people living in poverty in a sample of 33 African countries between 1990 and 2005 (Anyanwu and Erhijakpor, 2010). Country level studies in landlocked Burkina Faso (Wouterse 2010) and Lesotho (Gustafsson and Mokennen 1993) conclude that remittances are associated with a reduction in the share of people in poverty and in some cases, the depth and severity of poverty as well. In Mali, remittance receipts are saved for unexpected events, thus serving as insurance for entire households (Ponsot and Obegi 2010).

While portions of remittances finance consumption budgets, it can also enhance capital accumulation. There is empirical evidence that states remittances-receiving households perceive it as transitory rather than permanent income. Such perceptions contribute to a high propensity to save, since marginal propensity to save often dependent on the nature and sources of income. A study conducted among rural Pakistan households, found that marginal propensity to save was higher for remittances since they were more variable and uncertain (Adams, 2002). Among other things, Pakistani households use remittances to acquire land, build modern homes, set up new small-scale enterprises in the non-farm sectors, underwrite improvements in the agricultural sector, access electricity as well as clean water sources.

One household survey in five African countries[14] found that a significant portion of international remittances are spent on land purchases, building a house, business, improving the farm, agricultural equipment, and other investments. As Table 10 below shows, sampled African LLDCs spend greater portion of remittances on construction of new homes, clothing, marriage and funeral than their transit neighbours. Further investigation of the data reveals that sampled LLDCs spent more on consumption expenditure, whereas transit countries apportion a relatively large proportion of remittances into business and fixed asset acquisition.

At the national level, remittances can, and have been leveraged to access funds in the world capital market. A number of countries now issue remittance-backed bonds while others have been able to raise public revenue by taxing remittances. As already observed, remittances provide support to balance of payment accounts. They can also contribute to the acquisition of important technologies and other capital assets. In addition, migrants' remittances lessen the impact of brain-drain. The International Monetary Fund (2005) study finds that a 2.5 percentage point increase in the ratio of remittances to GDP is correlated, on average, with a one-sixth decline in aggregate output volatility.

14 Sampled countries were Burkina Faso, Kenya, Nigeria, Senegal and Uganda

Table 10: Remittances Expenditure

	LLDCs	Transit Developing Countries	Difference
New House Construction	14	8	6
Food	16	25	-10
Education	13	12	1
Health	9	8	1
Business	9	9	0
Clothing	3	0	3
Marriage/funeral	5	1	3
Rent	3	4	0
House rebuilding	3	5	-1
Cars and trucks	1	1	1
Land purchase	2	12	-10
Farm improvement	0	1	-1
Investment	0	8	-8
Other	23	7	16

Source: calculated from the World Bank (2011)

Remittances to developing countries are expected to reach US$ 540 billion by 2016, and in many countries, remittance flows exceed official development assistance (World Bank, 2013b). There are several reasons for this. First, more people are settling abroad. Second, it is increasingly easier, faster and cheaper to transmit money from one country to another. Third, a number of countries are experiencing a decline in their real ODA receipts. Remittances have critical counter-cyclical economic effect since the flows tend to increase in times of economic hardship, especially if they are a substantial source of family income.

Remittances reduce inequality. One study found that while Armenian remittances go to rural and urban households alike, it mostly went to the most vulnerable households. On average, remittances constituted around 80 percent of their income. It is, thus, possible that in the absence of remittance income, many of those families would end up at the very low levels of income (USAID/Armenia, 2004). Other studies also show that remittance receivers are typically better off than their peers who lack this source of income. For example, in Mexico, children from migrant-sending families completed between 0.7 and 1.6 more years of schooling than children from families without any migrants abroad (Ghosh, 2006). One cross-country study of 71 developing countries found that a 10 percent increase in per capita official international remittances will produce a 3.5 percent decline in people living in poverty (Adams Jr. and Page, 2005). In Nepal, a dramatic increase in remittances was responsible for one-third to one-half of the overall reduction in headcount poverty rate in the country, which declined from 42 percent in 1995/96 to 31percent 2003/04 (Government of Nepal, 2006).

A separate study that focused on 11 Latin American countries found estimated impact of remittances on poverty head counts to be is such that a 1 percentage point increase in the remittances to GDP ratio reduces moderate and extreme poverty by, respectively, 0.37 percent and 0.29 percent. The findings also suggest that from 1991–95 to 2001–05, the increase in remittances to LAC was responsible for a 2 percent increase in the share of domestic investment to GDP. The paper concludes that the impact of remittances on economic growth that took place through increased rates of investment was equivalent to 13 basis points per year, or about one-half of the total impact of remittances on growth estimated during that period (World Bank, 2008). Other studies have shown remittances to have positive impact in terms of reducing poverty and inequality, improve children health and educational attainment, particularly among low income households. Remittances to Latin American countries had less-than average overall impact on increasing access to financial services among recipient households, and promoting an overall increase in the level of financial development (ibid).

Remittances can also be counterproductive. There are incidences when remittance incomes have induced individuals to quit the workforce in pursuit of leisure[15]. For small economies, remittance flows have been observed to inhibit growth or competitiveness. In a variant of the Dutch disease, remittance inflow may dampen a country's exports if it leads to an appreciation of the external value of its currency. However, the upward pressure on the exchange rate of the national currency can be reduced if part of the remittance is spent on new imports. The World Bank states that to the extent that some of the remittance-induced consumption is directed towards the non-tradable, sector where competition is likely to be somewhat limited, remittances will tend to drive up the price of non-tradable goods, relative to that of tradable and, therefore, contribute to a real exchange rate appreciation. In view of the foregoing, remittances can generate adverse effects on the tradable sector of the economy, lead to the widening of the current account deficit (if imports are made cheaper at home markets by the exchange rates), and a weaker monetary control, inflationary pressures, and misallocation of investment (World Bank, 2008).

It has also been observed that reliance on remittance to finance development can be an impediment to undertaking structural reforms at household and national levels, as was observed in a number of remittance-receiving Mediterranean countries in the 1960s and 1970s (Korner, 1987). Dependence on remittance can also make a country inherently vulnerable to sudden changes in remittance receipts. This could happen as a result of a number of factors, such as: economic downtown, social instability in the host country, and/or sudden intolerance and hostility to immigrants.

Remittance Flows to LLDCs

There are several ways to estimate a country's exposure to external shocks that could be propagated through immigrants' remittances. In this section, we will briefly review the stock of remittance flows to individual LLDCs, as well as international migrants stock, expressed as a percentage of the total population. There are more people than ever that are living abroad. According to the United Nations Populations Division, 3.2 percent of the world's population was international migrants in 2013. It was estimated that there were 232 million migrants in 2013, compared with 175 million in 2000 and 154 million in 1990. Many of these people come from landlocked developing countries.

Between 2000 and 2010, an average 4.1 percent of the citizens of a typical LLDC were residents of another country. However, migrants stock was higher for twelve. From Figure 4 below, almost 20 percent of Kazaks lived outside the country, followed by Armenia (15.1 percent), and Moldova (12.2 percent). The ratio is particularly high for many of the countries that arose from the breakup of the USSR because in 1991, people living in one of the newly independent countries who were born in another were classified as international migrants. Relative to the total population, the net number of immigrants from the LLDCs has been in decline since 2000. During that ten-year period (2000 to 2010), only seven countries show a significant net positive gain. These countries are (in descending order) Botswana, Chad, Burkina Faso, Bolivia, Nepal, and Swaziland. Among countries whose migrant stock has declined the most include Armenia, Kyrgyzstan, Zambia, Moldova, Uzbekistan, Azerbaijan, Turkmenistan and Tajikistan.

15 Please see examples in: Ahlburg, Dennis (1991) "Remittances and Their Impact: A Study of Tonga and Western Samoa" Policy Paper No. 7, Canberra: National Centre for Development Studies, Australian National University; and Itzigsohn, Jose (1995), "Migrant Remittances, Labor Markets, and Household Strategies: A Comparative Analysis of Low-Income Household Strategies in the Caribbean Basin," Social Forces, Vol. 74, pp.633-655

Zambia's migrant stock has declined the fastest, at an annual average rate of almost 5 percent. On the other hand, Chad has witnessed a more than 17 percent annual increase in its diaspora population. Although a return of refugees, following successful peacebuilding initiatives, may explain changes in countries such as Afghanistan and Burundi, it is possible that prolonged economic crisis in host countries may have contributed to observed declines in other countries. Table 11 below shows net changes (and rate of change) in the immigrant stock between 2000 and 2010.

Migrants' remittances differ from one country to another, although they are expected to be dependent on the quality and quantity of the international migrants' stock of each country. As a percentage of GDP, remittances are especially high for Tajikistan, Kyrgyzstan, Nepal, Lesotho, Moldova and Armenia. On the hand, they are negligible for Kazakhstan, Botswana, Zambia, Malawi and Bhutan. As a percentage of GDP, migrant remittances are often high for Tajikistan, Kyrgyzstan, Nepal, Lesotho, Moldova and Armenia. While the group-wide average was 3.9 percent in 2012, remittances as a percentage of GDP for top performers were as follows: Tajikistan (49.3%), Kyrgyzstan (32.7%), Nepal (27.2%), Lesotho (25.5%), Moldova (24.1%) and Armenia (14.6%).

Figure 4: International Migrants Stock (2000-2010)

Source: The World Bank, 2013

Table 11: Change in the International Migrants Stock for the LLDCs

Select LLDCs with Net Migrant Gain			
2000-2010: Net % change		**2000-2010: Annual Rate of change (%)**	
Botswana	2.5	Chad	17.1
Chad	2.2	Botswana	8.0
Burkina Faso	1.7	Bolivia	3.7
Bolivia	0.4	Burkina Faso	3.6
Nepal	0.2	Nepal	0.7
Swaziland	0.2	Mongolia	0.7
Select LLDCs with net Migrant Loss			
2000-2010: Net % change		**2000-2010: Annual Rate of change (%)**	
Armenia	-8.2	Zambia	-4.8
Kyrgyz Republic	-3.5	Kyrgyz Republic	-4.6
Zambia	-1.7	Armenia	-4.4
Moldova	-1.6	Burundi	-4.0
Uzbekistan	-1.4	Ethiopia	-3.5
Azerbaijan	-1.4	Azerbaijan	-3.3
Turkmenistan	-1.2	Mali	-2.7
Tajikistan	-1.2	Malawi	-2.6

Source: The World Bank

The second column in Table 12 below shows the average remittances – relative to the sum of imports and exports[16]. Countries with significant remittance flows must be supported in dealing with possible remittance-related shocks that could come about as a result of abrupt changes in exogenous conditions, including exchange rate volatility.

Table 12: Migrant Worker Remittances to LLDCs (2001-2011)

Percentage of GDP		Annual % of Imports & Exports	
Tajikistan	48	Nepal	45.7
Kyrgyz Republic	31	Tajikistan	40.4
Nepal	25	Lesotho	35.1
Lesotho	25	Moldova	29.4
Moldova	24	Armenia	20.7
Armenia	21	Kyrgyz Republic	18.2
Mali	5	Uganda	17.2
Bolivia	4	Bolivia	12.2
Macedonia, FYR	4	Mali	10.6
Uganda	4	Azerbaijan	8.7

continued on next page

16 The share of remittances as a percentage of imports and exports is calculated using personal remittances data, which is different from migrants' remittance. Personal remittances consist of all current transfers in cash or in kind made or received by resident households to or from nonresident households.

Table 12: Migrant worker remittances to LLDCs (2001-2011) continued

Percentage of GDP		**Annual % of Imports & Exports**	
Mongolia	3	Paraguay	7.6
Azerbaijan	3	Mongolia	7.4
Rwanda	3	Macedonia, FYR	5.6
Paraguay	2	Burkina Faso	5.5
Niger	2	Niger	5.1
Burundi	2	Swaziland	3.6
Swaziland	1	Rwanda	3.5
Ethiopia	1	Ethiopia	3.5
Lao PDR	1	Burundi	2.0
Burkina Faso	1	Botswana	1.7
Bhutan	1	Zambia	1.4
Malawi	0.4	Kazakhstan	0.8
Zambia	0.4	Malawi	0.7
Botswana	0.1	Lao PDR	0.7
Kazakhstan	0	Bhutan	0.6

Source: The World Bank

Migrant Worker Remittances and the 2008 Crises

While there have been discussions on how to improve the development role of remittances, including exploratory work on how to reduce transaction costs, such discussions should also consider ways through which individual countries could be supported to develop effective mechanisms to address remittances-induced volatility and other shocks. As it has been shown in this section, remittances are important in augmenting household income, stabilizing consumption, funding productive activities, developing skill sets, and acquiring technologies, among others. Disruptions in remittance flows have negative implications to an economy, especially to the households that are most dependent on it. They threaten to cause a relapse in the social and human progress achieved under multilateral efforts, such as the MDGs. Shocks undermine household resilience by obliterating safety nets. A sudden and unexpected reduction in remittance income could mean the failure of a family to afford a meal, pay rent, send a child to school, or get the needed attention. Disruptions in remittances could imply the collapse of a business, loss of vital income, death of a dream and an uptick in joblessness and extreme poverty.

That remittances are anti-cyclical can be seen from their flows to LLDCs following the onset of the 2008 crises. In per capita terms, remittances increased some 38 percent, from around US$ 58 (2005/08) to US$ 80 (2009/12)[17]. As already observed, remittances are quite important to several LLDCs. On average, Swaziland has received, in per capita terms, around US$ 2246 since 2008, followed by Moldova US$ 1096. Other countries where remittances per capita exceeded US$ 100 were Armenia, Azerbaijan, Kyrgyzstan, and Lesotho. Per capita remittances more than doubled in seven countries (Afghanistan, Bhutan, Burundi, Kyrgyzstan, Laos, Moldova and Paraguay). At the same time, Botswana, South Sudan and Zambia suffered substantial contractions. Others include Lesotho, Macedonia and Niger.

17 Current prices

Table 13: 2008 Crisis and LLDC's Remittances

Remittance Per Capita	2005-2008	2009-2012	Change	
	US$	US$	US$	%
Afghanistan	3.91	13.86	9.95	254.5
Armenia	256	380.09	124.09	48.5
Azerbaijan	126.44	175.85	49.41	39.1
Bhutan	4.28	11.5	7.22	168.9
Bolivia	81.91	99.87	17.96	21.9
Botswana	61.3	36.76	-24.54	-40
Burkina Faso	5.46	8.24	2.78	50.9
Burundi	0.11	3.99	3.87	3406.5
Ethiopia	3.4	4.63	1.22	36
Kazakhstan	12.64	14.54	1.89	15
Kyrgyz Republic	130.38	272.93	142.55	109.3
Lao PDR	1.2	11.77	10.57	882.9
Lesotho	311.46	298.1	-13.37	-4.3
Macedonia, FYR	8.95	7.94	-1.01	-11.3
Malawi	21.3	30.29	8.99	42.2
Mali	15.24	18.32	3.08	20.2
Moldova	497.76	1096.81	599.06	120.4
Mongolia	30.74	45.02	14.28	46.5
Nepal	17.44	28.16	10.72	61.5
Niger	97.61	91.43	-6.19	-6.3
Paraguay	6.57	19.99	13.42	204.1
South Sudan	11.24	6.23	-5.01	-44.6
Swaziland	1256.97	2246.03	989.06	78.7
Tajikistan	44.01	51.65	7.64	17.4
Uganda	15.62	25.03	9.41	60.2
Zambia	4.97	3.29	-1.68	-33.8
LLDCs	**57.7**	**79.72**	**22.02**	**38.2**

Source: UNCTAD (data unavailable for Central African Republic, Chad, Rwanda, Turkmenistan, Uzbekistan and Zimbabwe).

CHAPTER FOUR

Political and Social Instability-Related Shocks

Not only are LLDCs geographically disadvantaged because they do not have access to the sea, many of them are located in regions that are politically unstable. While there is evidence that countries tend to realize positive spill over benefits from economic growth experienced in their neighbourhood, this is hardly true for landlocked developing countries. It is estimated that the global average effect for having a good neighbour that grows at 1 percent per year, induces nearly 0.4 percent growth in her neighbours. In fact, and according to Paul Collier (2008), there's an even stronger neighbour-induced growth experience in resource-scarce landlocked countries, including Switzerland, where it is around 0.7 percent.

Besides transit dependency on their neighbours, landlocked developing countries also consider their immediate neighbours as crucial markets for their goods and services. Unfortunately, majority of the LLDCs experience little positive externality from their neighbours, and cross-border trade is negligible and far from full potential. For LLDCs located in Africa, Collier (2008) finds that a 1 percent GDP growth in a neighbouring country realize, on average, a mere 0.2 percent growth.

This section discusses why LLDCs are unable to fully benefit from prosperity elsewhere in their regions, and the effects of social and political-related shocks. Political unrest, punctuated by brutal ethnic and civil wars outside and inside of the LLDCs spawns macroeconomic and social shocks that call for concerted efforts to address. This section observes that while there are few countries that remain relatively unaffected from political fallout, the LLDCs of the Great Lakes region and West Africa, along with Afghanistan, have been affected disproportionately more than many other countries and regions.

4.1 Shocks from Political Instability

Just as there is a strong relationship between economic growth and political stability, there is an observed strong association between poor countries and instability. Shocks stemming from social and political unrest undermine macroeconomic stability and prevent an economy from reaching its full potential. Poor economic performance and stunted growth also cause the government to fall. Political instability, defined as the propensity for a government collapse, disrupts general economic confidence, reduces investment and slows down the speed of economic development (Alesina, et al. 1992). Frequent and irregular change in the executive is associated with uncertainty in the policy direction of the incoming government.

Political disorder, especially in the wake of regime changes delay the inflow of foreign resources or precipitate a wide-scale exit of foreign investors. Studies in this area show that besides significantly lower growth rates manifested by politically unstable countries, political instability tends to be persistent, such that frequent government collapse increases the probability of more collapses in future (Barro 1989; 1991). Putting it differently, in countries where rulers are easily overthrown, there is a higher likelihood that their citizens will engage in revolutionary activities more than in productive market activities.

Political instability creates instability in other areas, such as inflation and external borrowing. A number of studies have demonstrated that high degree of political instability negatively impact foreign direct investment and cause high levels of inflation (Goodrich, 1992; Cukierman, Edwards and Tabellini, 1992). In addition, weak governments are likely to result in rent-seeking activities, such as bribery and appeasement of lobbyists and special interest groups. As a result, decision-making process of such governments is often suboptimal.

In many countries, the physical, human, social and economic legacy of civil war is obvious. In the advent of a war, government expenditures get diverted away from economic investment into the military. As private economic actors shift their capital abroad, governments often resorts to debt accumulation to finance military needs and sacrifice future gains from good economic policies in favour of short-term gains from polity deterioration. Other countries choose to undertake mass military conscriptions – reassigning human capital from civilian economic activities to military duty. Political instability and war may accelerate the collapse of government institutions, law and order, thereby, encouraging anarchy, predation and opportunism. In a nutshell, people shift their economic spending and activities into subsistence and opportunistic ventures, which are less reliant upon other parts of the economy.

There is increased understanding that principal constraints on development are poverty and violence traps. This proposition is supported by evidence which shows peaceful countries escaping poverty, and at the same time abject poverty is becoming concentrated in countries devastated by civil war, ethnic conflict and organized crime. Violence and political instability prevent them from undertaking concrete measures to escape the trap. It is against this backdrop that there is a consensus, at least at the multilateral and regional level, to provide increased support to fragile and post-conflict countries as they transition to normalcy. There is, however, another reality. For most of the poor countries – including those counted among LLDCs – lack of development, widespread poverty and hopelessness are key determinants of long-running instability and violence. Social cohesion and tolerance, at all levels, are directly related to the level of social and economic wellbeing of a society.

Conflicts and ensuing stability hold serious short-term and long consequences to affected populations and nations. The fact that peacekeeping budgets are, at times, larger than national budgets of the affected countries, every effort should be made to foster economic growth and development that is both sustainable and inclusive.

4.2 Social and Political-Related Shocks in theLLDCs

A number of the LLDCs are found in politically unstable regions. Over the years, simmering conflicts and full-fledged wars have ushered a series of development challenges to these countries. Civil wars have resulted to the loss of life, human displacement and destruction of property. A defining characteristic of being landlocked is the challenge of facing the threat of internal as well as neighbour's conflicts. Since LLDCs rely on the neighbouring transit countries to export and import their merchandise, they are extremely vulnerable to the social and political unrest that may arise outside their borders. In a number of cases, it is inevitable for the LLDCs to rely on the infrastructure of a transit country that has been severely degraded by conflict, natural disasters, poor administration, or dwindling resources. Lacking an alternative route to the sea, LLDCs are forced to operate within such difficult confines, which translate to unreliable transport network, higher costs and increased risk en route to the sea.

A number of LLDCs have long-running border disputes with their neighbours. At times, some of these hostilities have exploded into open-armed warfare. Historic hostilities, mistrust and an unequal relationship between LLDCs and their transit neighbours may prevent or slow down efforts to forge genuine, mutual partnerships. Even when there is no direct conflict, landlocked countries are extremely vulnerable to the political vagaries of their neighbours. If a landlocked country and its transit neighbour are in conflict, either military or diplomatic, transit neighbour can easily block borders or adopt regulatory impediments to trade. While a legal basis for rights of landlocked transit as outlined in Article 125(1) of the United Nations Convention on the Law of the Sea (United Nations, 1982) exists, this right of access can only be agreed upon with the transit neighbour (Article 125(2) and (3)), and this is greatly dependent on the prevailing relationship between countries.

Indeed, ongoing instability in a number of countries around the world remains a cause of concern in neighboring countries. In the aftermath of the political and social crises in North Africa, landlocked developing countries of Chad, Burkina Faso, Niger, Mali and Central African Republic were confronted with a number of challenges, including rising food insecurity. The massive influx of returning migrant workers from Northern Africa, especially Libya, deprived thousands of families in these countries of remittances, while at the same time placed an economic burden on returnee communities. As of November 2011, the International Organization for Migration (IOM) estimated that the number of migrant workers who had fled from Libya into neighbouring countries, including the LLDCs of Burkina Faso, Chad, Mali and the Niger stood at over 420,000. In addition to depriving thousands of families of remittances, the crisis fuelled increases in the price of basic food supplies, created food shortages and exacerbated an already tenuous security and humanitarian situation in the Sahel region.

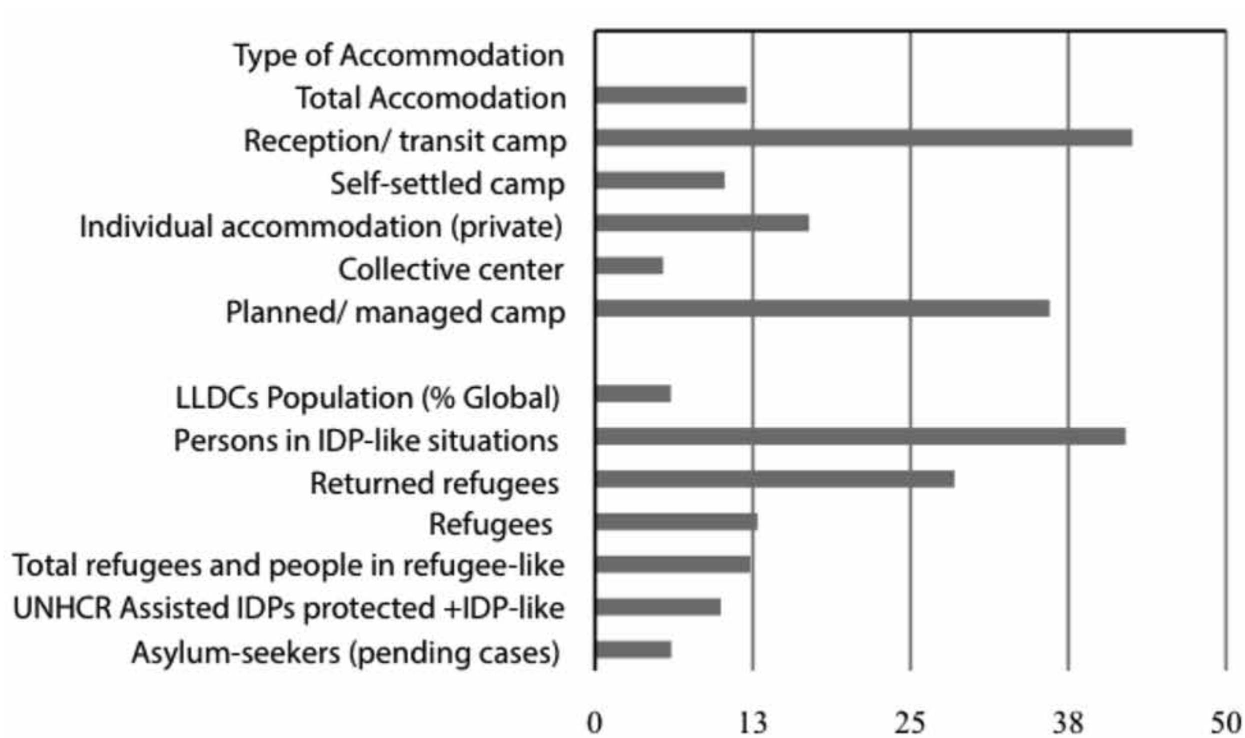
4.3 LLDCs and the Refugee Burden

The Burden of Refugees on the LLDCs

Over the years, social and political instability in the LLDCs has triggered an exodus of refugees across national borders to neighbouring countries. For instance, Afghanistan has been hit the hardest and longest by violence, to the point of collapse of nearly all critical government institutions and infrastructure. In 1994, Rwanda and Burundi underwent one of the most atrocious periods of human tragedy which led to the deaths of more than a million people – all in a little over a hundred days. Mali, Central African Republic, Uganda, Chad, Ethiopia, South Sudan and Niger have all suffered heavily from armed internal conflicts, or with their neighbours.

But how have LLDCs been impacted from external social and political violence? Possible answers can be found in examining data on refugees, asylum-seekers, internally displaced persons (IDPs), returnees (refugees and IDPs), and stateless persons made available by UNHCR. In 2012, LLDCs had a combined population of about 420 million or around 6.0 percent of the global population. To underscore their relatively small population sizes, 16 of the 31 countries have a population of less than 10 million people. In 2012, Bhutan had the least number of people, at 738,000. Only four countries (Ethiopia, Uganda, and Afghanistan) had more than 30 million people.

Figure 5: Vital Refugee Statistics for LLDCs



Source: UNHCR, 2014

At the end of 2012, UNHCR reports that there were over 1.2 million refugees in the LLDCs. This was equivalent to 12.9 percent of the total global refugee population of 9.9 million. Indicative of internal turmoil in the LLDCs, a full 42 percent of all persons in IDP situations-like around the world were located in the LLDCs, of which 10 percent were receiving assistance from UNHCR (Figure 5). Persons in IDP situations-like group include all persons displaced within their country – some of whom UNHCR extends protection and/or assistance. The category also includes persons who are inside their country of nationality or habitual residence and who face protection risks similar to those of IDPs but who, for practical or other reasons, could not be reported as such.

UNHCR data on the types of refugees' accommodation provides further the relative refugee-burden borne by each country. 36.0 percent of UNHCR planned or managed camps are found in LLDCs – of which 5.4 percent are collective centers. Approximately 17 percent of private refugee accommodation arrangements take place in the LLDCs. Finally and more importantly, 42.6 percent of all refugee reception and transit logistics take place in landlocked developing countries.

There are direct and indirect costs associated with hosting refugees. Some of these costs are borne by the international community. However, host nations must often content with increased demand on already overstretched infrastructure, such as roads, railroad, telecommunication network, and water as well as electricity grid. There have been incidences when countries have been reluctant to accept refugees, on the premise that they lead to the smuggling of weapons, drugs and other contrabands, spread communicable diseases, degrade the environment, and foment political, ethnic, racial and social strife. Other reports observe frequent and overt competition between refugees and nationals over such matters as land, grazing ranges, water, fuel wood and education and public health facilities[18]. In the end, there is more and more consciousness by asylum states and their populations of the economic and resource burdens of hosting large numbers of refugees. Despite their small population and land size, unfortunately, LLDCs bear greater burden when it comes to refugees and internally displaced persons. The latter is a pointer to LLDCs' vulnerability to external shocks that stem from social and political instability.

18 Please see, UNHCR (2000) Working Paper No. 19 titled "Refugee identities and relief in an African borderland: a study of northern Uganda and Southern Sudan" ISSN 1020-7473. This report states that "Harrell-Bond (1986) has been critical of the relations between refugees and hosts when describing the Ugandan refugee settlements in southern Sudan. In her studies she focused on the refugee aid agencies with their extreme refugee-centric approach, and she argues that refugees have a great impact on the poorer members of the host population. The competition between them and the refugees is increasing; while refugee programmes and aid agencies destroy the old modes of adaptation that exist in local communities. Consequently integration of refugees in host communities was never achieved in southern Sudan".

CHAPTER FIVE

Disaster and Climate Change-Related Shocks

LLDCs remain vulnerable to climate change-related extreme weather events, such as droughts, floods and landslides. The direct impact of these occurrences include loss of human life, displacement, repeated crop failures, worsening food crisis, destruction of critical infrastructure, and disruption of economic activities. Natural disasters engender dependence and prevent countries from attaining sustainable and inclusive economic growth. The recurrent nature of these crises imposes a substantial cost on the LLDCs' economies that are relatively small, poor, and isolated. Natural disasters trigger asset reallocation into recovery – and away from buttressing macroeconomic foundations, including capacity development.

To landlocked developing countries, a number of natural disasters are clearly external shocks since they are triggered by actors that fall outside their confines. For instance, climate change is responsible for changes in precipitation, including, intensity and frequency of storms, rising sea levels and droughts. While their impact on the LLDCs' physical, social and economic infrastructure is catastrophic, it is acknowledged that the primary contributors of Carbon dioxide and other global warming pollutants – all of which are blamed for climate change – are originated from outside. To many of LLDCs, extreme weather is, thus, considered an externality.

There are other disasters, man-made or natural, that occur elsewhere but whose effects are acutely felt by those in the LLDCs. Depending on when and where they happen, such disasters spawn powerful demand-side and/or supply-side shocks. Mega-disasters, such as the Indian Ocean tsunami (2004), Hurricanes Katrina and Rita (2005), the powerful earthquakes that hit Haiti (2010) and Japan (2011), are clearly increasing both in scale and frequency, and have the undeniable ability to affect many countries beyond those that suffer a direct hit. Such disasters interrupt and divert the flow of foreign financial assets, such as FDI and development assistance to fragile and vulnerable countries and societies.

The occurrence of a large natural disaster, with immense loss of human life and destruction diverts resources and attention from seeking long term solutions to structural impediments, such as landlockedness and extreme poverty, to the recovery and reconstruction of the impacted communities.

From an economic perspective, a natural disaster can be defined as a natural event with a significant negative impact on assets, production factors, output, employment, or consumption. It is an occurrence with a perturbation to the functioning of the economic system (Hallegatte & Przyluski 2010). Such disasters include earthquakes, hurricanes, tsunamis, floods, droughts, heat waves, cold spells, thunderstorms, windstorms, lightning and landslides. One background report states distinguishes four main catego¬ries of natural disasters, namely; geophysical such as earthquakes and volcanoes; meteorological such as storms; hydrological which include floods; and climatological such as drought, heat waves and cold waves (UN-DESA, 2012).

Climate change, defined as a long-term shift in the statistics of the weather, affects the mean as well as the temporal and spatial distribution of temperature. It is expected to increase the frequency, the geographic distribution and the intensity of some weather events. Indeed, all weather-related disasters are potentially impacted by climate change. Geophysical disasters, such as earthquakes are not expected to be impacted by climate change.

There is scientific consensus that concentrations of greenhouse gases in the atmosphere are increasing, and that this is causing global climate change. Human-driven emissions of carbon dioxide and other greenhouse gases, as well as unsustainable consumption patterns and land-use change, are primarily responsible for the increase. Concentrations of greenhouse gases, especially carbon dioxide, have risen over the past two hundred and fifty years, largely due to the combustion of fossil fuels for energy production.

Climate change alters precipitation patterns, and is responsible for changes related to the intensity and frequency of storms and rising sea levels. Climate change negatively impacts people's livelihoods by weakening their resource base, triggering migration, threatening food sources, and limiting options and capabilities. As is the case with majority of the developing countries, LLDCs are heavily impacted by climate change yet their contribution to Carbon dioxide and other global warming pollutants is negligibly low. references to land degradation, desertification, drying up of aquifers, glacier melting, and frequency of flash floods and long spells of dry seasons could be highlighted together so thatThe hydrological disasters are taken up systematically as they are the biggest disasters.

5.1 The General Impact of Natural Disasters

Natural disasters have both direct and indirect market and non-market implications. Direct market losses, which include damages to the built environment and manufactured goods, can be estimated as the cost of replacing or repairing destroyed or damaged assets. Such losses are often estimated using observed prices and inventories of physical losses that can be assessed. Non-market direct losses, on the other hand, include all damages that cannot be repaired or replaced through purchases on a market, such as health impacts, loss of lives, natural asset damages and ecosystem losses, and damages to historical and cultural assets. By their very nature, non-market direct losses are difficult to quantify. Indirect losses, market and non-market, are secondary and only arise as a matter of consequences.

Besides macroeconomic interruptions, impacts of disasters include loss of lives and livelihoods, damage to infrastructure and communications, and increased risk of disease outbreaks. In many LLDCs, these impacts are worsened by difficult topology, poverty and lack of economic security, marginalization and overcrowding. The assets of the poor, although less than those of the rich, are relatively more exposed to natural disasters. Majority of the households in the LLDCs lack sufficient productive assets that they could fall back to in the event of a disaster.

Natural disasters induce extreme supply shocks that hold both short and long-term macroeconomic implications, including production output, trade and government budget balances. Natural disasters can then induce shifts in monetary and fiscal policies to address disaster-induced inflation and emergency expenditure. Trade balance is affected since the capacity to produce exports falls and reconstruction needs increase import demand, and divert tradable goods produced domestically to domestic consumption. Downward pressure on the exchange rate is expected due to a weak balance of trade arising from concerns of foreign investors at possible loss of potential earnings and higher taxes to finance recovery and reconstruction.

Long term macroeconomic implications may include the reallocation of resources away from the most productive sectors and activities, to recovery initiatives. Prompt, well-coordinated response can have a powerful effect in reducing the long term macroeconomic damage caused by natural disasters. In addition, donor assistance such as disaster relief and recovery packages can help preserve committed resources in the productive sectors, even during a crisis.

Climate change, manifested in rising temperatures, loss of suitable agricultural land, increases in soil erosion, land degradation and desertification, shortening of growing season, reduction in crop yields and high frequency and intensity of extreme events is adversely affecting the agricultural sector, the economic backbone of many LLDCs. Climate change threatens livelihoods, incomes, food production, food security as well as export earnings. Increased agricultural instability could directly and indirectly affect the general economy through its impact on export stability and earnings, as well as through vertical and horizontal inter-linkages.

Some have argued that disasters can be a catalyst for a rapid turn-over of capital through the adoption of new technologies. In what has been termed as “the Schumpeterian creative destructive effect”, damaged or destroyed productive capital such as a bridge or road can be replaced using more recent technologies, thus higher productivity. This could explain, perhaps, why GDP growth rates after a disaster rise beyond the pre-crisis period. Indeed, some scholars have suggested that in the aftermath of a natural disaster, an increase in economic growth is indicative of the said productivity effect (Skidmore and Tuya, 2002). While the so called “Schumpeterian effect” offers an opportunity to countries emerging from disasters, there is little evidence that it would work for most developing countries. These countries, including LLDCs, often experience significant resource and technical capacity shortfalls when it comes to rebuilding destroyed basic infrastructure. To increase productivity, reconstruction programmes need to go beyond simply replacing damaged infrastructure.

A changing climate leads to changes in the frequency, intensity, spatial extent, duration, and timing of extreme weather and climate events, and can result in unprecedented extreme weather and climate events such as flash floods, hurricanes, windstorms, landslides, wild fires and droughts. Global surface temperatures have risen sharply more recently, and coincide with these extreme and sudden weather events that have notably become more frequent, more extreme and more deadly. Against this backdrop, studies warned more than a decade ago that as a result of both climate change and the increasing concentration of the world’s population in vulnerable areas, natural disasters will become more frequent, more intense and more costly in the coming years (Freeman et al., 2003).

The damage caused by extreme weather events depends on the intensity of the event as well as where it strikes. When the intensity of an extreme weather increases from low to intermediate, its marginal damage is considerably higher. The concentration of large populations in vulnerable areas, such as low-lying coastal communities or mega-cities elsewhere, increases the likelihood that even a small extreme event can cause significant damage. As surface temperature increase, it is likely that the frequency and intensity of extreme weather events will accelerate. In addition, population growth has forced a growing number of people to move into more vulnerable areas, thus increasing their exposure to direct hit from these disasters. One study that tracked direct losses from extreme weather events between 1950 and 2003 showed that while world GDP per capita had increased by an annual average of 3.4 percent, disaster costs had risen by an average 7.4 percent over the same period (ibid.).

Citing several limitations, the Intergovernmental Panel on Climate Change states that there is high confidence that increasing exposure of people and economic assets has been the major cause of long-term increases in economic losses from weather- and climate-related disasters. Additionally, while there is medium evidence that long-term trends in economic disaster losses adjusted for wealth and population increases have not been attributed to climate change, but a role for climate change has not been excluded (IPCC 2012). An important point regarding the impact of natural disasters in developing countries, including the LLDCs, is that while their absolute monetary costs tend to be low, they have higher relative costs. In other words, extreme weather events and natural disasters impose greater economic strain on developing countries than on advanced economies. In addition, mortality losses from natural disasters are far greater in the poor countries, reflecting their lack of preparedness and greater vulnerability. One study in this area observed that on average, 22.5 people die per reported disaster in highly developed nations, 145 die per disaster in nations of medium human development, while each disaster in countries of low human development claims an average of 1,052 people (Freeman et al. 2003).

Even if the magnitude of and frequency in the occurrence of natural disasters were to remain constant, the growing exposure and concentration of large populations in heavily settled areas is bound to exacerbate their impacts. Especially vulnerable are the poor, who are often priced out of safer areas. The proportion of people in the LLDCs that live in urban areas has nearly doubled since 1960s – to the current level of around 37 percent. Urban population in 17 of the 31 LLDCs has doubled, with Botswana posting the biggest jump – from 3.1 percent in 1960, to 61.6 percent in 2012.

A number of LLDCs, including those in African countries have experienced some of the worst droughts and famine in terms of number of people killed or number affected. Countries regularly impacted include Botswana, Burkina Faso, Chad and Ethiopia. Lack of direct access to a seaport, inadequate transport infrastructure and long overland distance impedes the rapid receipt and distribution of food and medical aid. For instance, since 2003 Ethiopia has suffered a series of repeated drought episodes that have left more than 7 million people in need of emergency food assistance. In addition, the country also experienced disastrous floods which destroyed roads, rails, dams and buildings. As a result, the country spent almost 11 percent of GDP in repairs.

Torrential rains have been a source of repeated catastrophic landslides in Eastern Uganda. In 2009, rainfall triggered massive landslides that killed 300 people in the mountainous Bududa region. A year later, landslides flattened several villages, killing 35 and displacing nearly 1500 people. In Mongolia, recurrent droughts and dzud (a period of extremely cold winter marked by heavy and protracted snowfall), low cold temperatures and wind storms, are some of the severe challenges which have affected nomadic livestock agriculture. In the South American country of Bolivia, the 1997/98 El Nino caused a total loss of US$ 530 million or approximately 2.2 percent of its GDP[19].

Glaciers and icecaps are important long-term reserves of fresh water. For instance, water from glaciers contributes 10-20 percent of runoff in Tajikistan's large rivers, particularly hot and dry years (UNDP 2009,). Evidence shows glaciers across the world to be shrinking significantly at a rate that varies in time and space. Several landlocked developing countries are also at the risk of melting glaciers that has been blamed on climate change. In Central Asia, average degradation rates are thought to have varied between 30 and 35 percent in the last century, and between 20 and 30 percent in the last 50 years (UNDP, 2009). A sustained melting of glaciers increases the volume of water in rivers, and sedimentation, the latter often chocking up water supply and affecting agriculture. In many places, melting glacier is giving rise to unstable water bodies, including lakes.

19 For a comprehensive summary of how climate change affects LLDCs, please see the forthcoming report "The Impact of Climate Change, Desertification, and Land Degradation on Development Aspects of the LLDCs" of UN-OHRLLS.

A number of countries have suffered from catastrophic glacial lake outburst flood (GLOF) – sudden discharge of water caused by the collapse of walls around the lakes. GLOF events have increased in the latter part of the 20th Century, resulting in loss of life, property and livelihood in Bhutan, China, India, and Nepal. One report notes that in recent past, Nepal alone has been affected by some 21 GLOF events, while more than 200 potentially dangerous glacial lakes have been documented across the Himalayan region (UNDP, . Bhutan's most devastating GLOF event was in 1994, when Lake Lugge Tsho burst, killing 20 people. Bhutan was thought to have some 25 potentially dangerous glacial lakes, including Thorthormi (WWF 2009).

Food security situation in the majority of the LLDCs remains precarious, and climate change is likely to make it worse. According to the IFPRI (2012) Global Hunger Index (GHI), a tool designed to comprehensively measure and track hunger globally and by region and country, prevalence of hunger in the LLDCs has declined somewhat, from "alarming" in 1990s to the current level of "serious". To reflect the multidimensional nature of hunger, the GHI combines three equally weighted indicators for undernourishment, child underweight and child mortality from UNICEF, WHO, and FAO.

Hunger prevalence in the LLDCs has declined faster than elsewhere but it is still unacceptably high. Between 1990 and 2012, hunger index for LLDCs decreased by 38 percent – compared to 32 percent for transit developing countries, and 35 percent for 120 countries where measuring hunger is considered most relevant. The report shows that besides Burundi, at least one-fourth of the populations in Ethiopia, Chad and Central African Republic remain acutely vulnerable to severe hunger. This vulnerability arises from perennial droughts in the region. Table 14 below provides the Global Hunger index ranks for some select LLDCs.

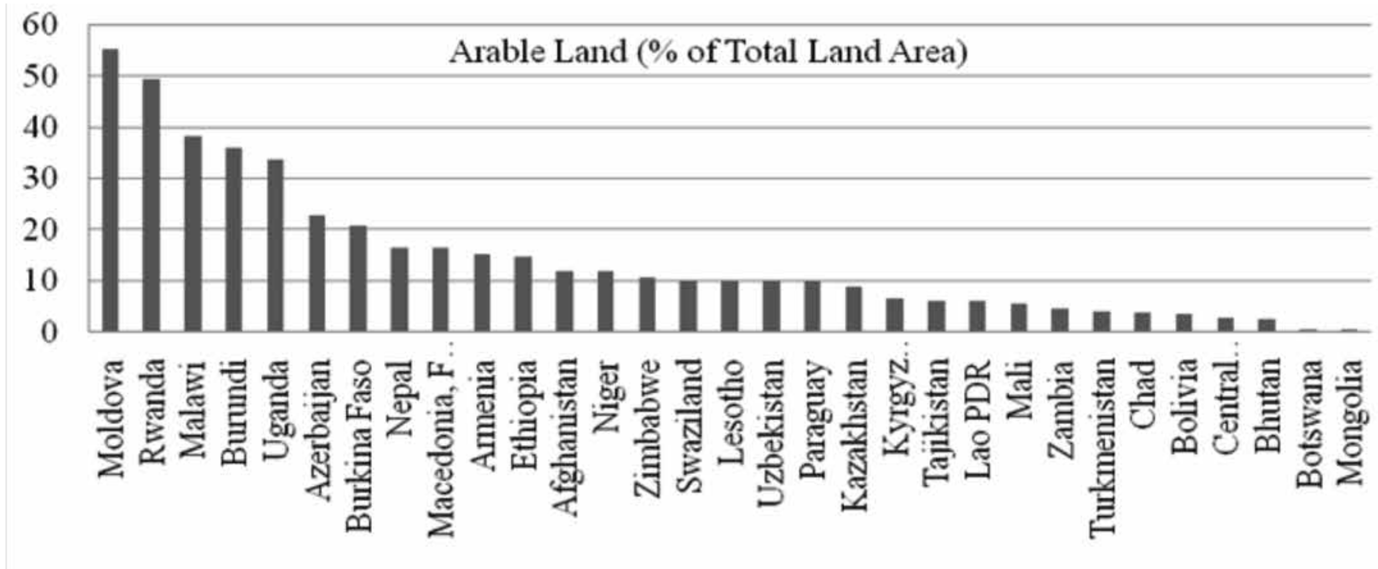
Table 14: Global Hunger Index for Some LLDCs

	Rank	% Score		Rank	% Score
Botswana	43	60.0	Ethiopia	90	31.2
Paraguay	53	52.9	Niger	91	30.1
Kazakhstan	58	51.4	Burkina Faso	92	29.9
Bolivia	65	46.2	Rwanda	96	29.3
Azerbaijan	71	43.1	Malawi	99	28.3
Uzbekistan	73	40.9	Zambia	100	28.1
Uganda	77	38.3	Mali	102	26.8
Tajikistan	83	34.2	Burundi	103	26.3
Nepal	84	33.8	Chad	106	22.1

Source: IFPRI (2012)

While climate change threatens landlocked developing countries on multiple fronts, it is the impact of extreme weather on the agricultural sector, in particular, that is especially dire. As an economic mainstay, agricultural value-added proportion to GDP, constituted more than 20 percent for half of the 26 countries with data in 2011. The agricultural sector is especially critical to the economies of Burkina Faso, Burundi, Ethiopia, Laos, Malawi, Nepal and Rwanda. Just 14.5 percent of the total land area of the LLDCs is arable (Figure 6). Arable land comprise of at least 20 percent of total land area in just seven of the thirty-one LLDCs. But about 70 percent of the people are dependent on agriculture. For most of them, however, the agricultural sector is largely unmechanized, smallholder farming which manifest low productivity due to inadequate use of fertilizer, unreliable precipitation and poor soil quality, among other factors. Majority of the farmers are unprotected from crop failure and other associated risks.

Figure 6: Arable Land as a Percentage of Surface Area for the LLDCs



Source: The World Bank

5.2 LLDCs and Disasters

United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA) states that it coordinated humanitarian assistance for some 81.2 million people affected by the world's worst crises in 2013. Landlocked Central African Republic was among three countries, besides Syria and the Philippines where level-three (L3) emergencies – the highest-level crises for the UN and partner agencies – were declared. In addition, two countries, Mali and South Sudan (both LLDCs), were designated as "corporate emergencies", triggering OCHA's highest response (UN-OCHA, 2014).

Table 15: Recent Natural Disasters

Event	Date	Damage (US$)	Deaths	Location
Indian Tsunami	26/12/2004	10 Billion	230,000	Multiple
Hurricane Katrina	29/08/2005	81 Billion	1,833	USA
Haiti Earthquake	12/01/2010	14 Billion	159,000	Haiti
Japanese Tsunami	09/06/2011	235 Billion	15,883	Japan
Hurricane Sandy	29/10/2012	68 Billion	148	Multiple
Typhoon Haiyan	08/11/2013	2 Billion	6,300	The Philippines

Source: multiple

Due largely to their dependence on other countries for transit, foreign financing and international trade, LLDCs remain vulnerable to disasters that do not necessarily happen within their borders and region. Table 15 below gives a summary of mega-disasters that occurred outside of the LLDCs but which had major impact on the LLDCs. Some of the implications from these disasters have been discussed in this chapter, with resource reallocation and refocusing of attention away from core development challenges, such as landlockedness being a few.

In conclusion, this chapter has shown that LLDCs are impacted by external shocks related to climate change and natural disasters. Resource poor and vulnerable countries are increasingly faced with difficult challenges of dealing with direct and indirect impacts of such shocks. For instance, even when climate change-related impacts are not directly felt locally, within a country or a region, net food importing LLDCs could still be impacted, especially if extreme weather leads to crop failure, food shortages and higher prices on the world markets. In addition, the occurrence of a large natural disaster elsewhere can impact LLDCs through the disruption of growth trajectory of trade and inflow of external finances. In order to cope with the fallout of a destructive hurricane, earthquake or tsunami, development partners may reallocate assistance meant for LLDCs to the ravaged countries. Besides, exports and imports from LLDCs may be affected if their key trading partners were to suffer a natural disaster. These problems call for concerted efforts to develop a holistic and comprehensive response to the challenges of external shocks.

CHAPTER SIX

Recommendations and Conclusion

6.1 Recommendations

It is neither practical nor possible for any economy to be completely insulated from external shocks. International trade, globalization, political and economic integration efforts, as well as the accelerated free flow of resources, including workers, across national borders will always continue to create exposure to exogenous environment. Notwithstanding this reality, it is important for policymakers to seek measures that enable countries to minimize exposure to external shocks, and lessen impacts thereof. A robust, diversified and well developed economy is sheltered from frequent shocks, and has inbuilt mechanism to rebound following system-wide or thematic specific shocks. This report has discussed at length how LLDCs are impacted by three kinds of external shocks: financial and economic; social and political; and climate change and natural disasters.

In general terms, measures should be undertaken to: strengthen resilience at national and household levels; build bulwarks to manage post-shock impact; and finally, establish and strengthen the functioning of core institutions. A number of the recommendations for LLDCs and their development partners are consistent with the **Hyogo Framework for Action** and the International Strategy for Disaster Reduction for Nations and Communities. Following the World Conference on Disaster Reduction was held from 18 to 22 January 2005 in Kobe, Hyogo, Japan, a Framework for Action 2005-2015 was adopted with the following five priorities: (i) ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation; (ii) identify, assess and monitor disaster risks and enhance early warning; (iii) use knowledge, innovation and education to build a culture of safety and resilience at all levels; (iv) reduce the underlying risk factors; and (v) strengthen disaster preparedness for effective response at all levels. In view of what has been discussed in the preceding pages, the following are some suggestions on how with the development challenges of external shocks can be comprehensively addressed. These recommendations are divided into groups.

6.1.1 Actions by LLDCs

a) **Diversification:** There is an urgent need for LLDCs to pursue measures that would lead to diversification of production and export markets across multiple fronts. Diversification represents pragmatic means of spreading risk. In particular, LLDCs must undertake investment and policy re-orientation that would create other productive sectors capable of supporting economic growth in tandem with the existing few commodities or minerals. There is also a need to diversify international markets and trading partners. For many LLDCs, most of their international trade transactions take place with one or two partners.

b) **Economic transformation**: Closely related to but different from diversification, economic transformation implies a substantive reorganization of the economy, its actors and how they interact. Economic transformation may include deliberate efforts to promote industrial development and value addition, transitioning from low-productive informal sector to more efficient production arrangements that have strong back and front linkages, and that can support rapid and inclusive growth, as well as job creation. For the LLDCs, economic transformation may also imply supplanting low-value, bulky exports with high-value, low bulk commodities that are less dependent on overland transport. In some cases, there is an urgent need to replace large and inefficient state corporations with more efficient private enterprises as well as timed liberalization measures to develop local entrepreneurs and create competition.

c) **Safety nets:** There is a need to develop safety nets both at the national and household levels that could be utilized when external shocks hit. For Governments, this may include pursuing sound fiscal and monetary policies that would create budget surpluses and robust international reserve holdings. There is also a need to have targeted and strategic social protection mechanisms. At the household level, this may include holding additional liquid assets and food stocks in case of sharp increases in prices, or extreme weather. The ability to create enough well-paying jobs that would allow multiple income sources for families is important.

d) **Science and technology:** Modern technology can be employed to deal with external shocks, especially those that relate to climate change. In this context, LLDCs should be supported as they pursue mechanized farming, establish irrigation schemes and intense greenhouse cultivation. There is a wide array of possible initiatives that could be undertaken under climate change adaptation and mitigation measures. An early warning system can prepare communities against impending dangers stemming from natural as well as manmade disasters.

e) **Strong domestic and regional economies:** Often times, external shocks can be mitigated by local solutions. LLDCs must accelerate efforts to develop and strengthen their economies to support a growing domestic demand. Such measures should be complemented by efforts to have stronger regional economies. Countries can compensate shortfalls in the external markets by stimulating domestic and/or regional demand.

f) **Alternative routes to sea.** Many LLDCs do not have the luxury of multiple routes to the sea. Efforts to get alternative routes are prevented by distance, cost and difficult geography which include desert and mountainous terrain. But a continued reliance on a single transit route is untenable. Stronger ties with neighbouring countries and regional efforts can lead to the development of alternative transit routes and corridors. It is also important to underscore the fact that investing in air transport infrastructure can fast track economic diversification and structural transformation efforts. For instance, airfreight can support the exporting of low-bulk, high value products, while cheaper international flights can promote growth in tourism and other areas of the service sector.

g) **Governance**: Functioning government institutions often inspire investor confidence, promote sound policy development and underwrite efficiency and productivity. Many LLDCs need to make serious efforts to develop their institutions and policy environment critical in dealing with external shocks and economic growth. The development of a vibrant private sector is equally important.

6.1.2. Actions by the International Community

a) **Coordinated response.** The 2007 financial and economic crisis provided fresh impetus for the need to promote close intergovernmental efforts for joint-response to external shocks. While such efforts at the international level are crucial, it is equally important that coordination is achieved at the regional and sub-regional level.

b) **International risk insurance.** For LLDCs, international trade is encumbered by high transaction costs stemming from distance to the seaport, and the risks associated with dependence on a single transit route and neighbouring countries. The international community can support LLDCs through the creation of a special insurance scheme that covers external shocks. This proposal is hardly new: a number of countries already have insurance policies that protect farmers against extreme weather events, such as floods and droughts, which come about as a result of climate change.

c) **Development and humanitarian assistance.** In the event of external shocks fallout, there is often an urgent need for emergency funding to support economies and communities recover. However, some of the external shocks are slow and indistinct at the global level. Given that LLDCs clearly suffer greater damage from all sorts of external shocks: financial, economic, social, political, environmental, natural etc., it is important for international community and development partners to provide them with adequate and predictable assistance through different international support measures. A novel way to promote aid effectiveness may be to offer development assistance on the basis of country-level exposure and resilience to external shocks. Humanitarian assistance can be pegged on exposure whereas the quantity of development assistance can be extended on the account of resilience, or lack thereof.

d) **Comprehensively address**, on a global level and on a more sustainable basis, primary and more predictable sources of external shocks, including but not limited to: financial and economic crises, climate change, social instability, political unrest, armed conflicts, the refugee crisis, and other anthropogenic disasters.

6.2 Conclusion

There is a growing recognition that external shocks constitute a serious challenge to the economic outcomes of many countries. For the LLDCs, this understanding has been made even more poignant by the destructive effects of the global economic recession that was sparked by the sub-prime mortgage crisis in the United States in the summer of 2007. There is a growing call for action and better understanding of how external shocks interact with different macroeconomic outcomes, such as output, consumption and soundness of the overall economy.

This report was prepared as a response to the call by the United Nations General Assembly for research on how external shocks impact landlocked developing countries. The answer provided in these pages is far from being conclusive. This report has, however, provided the general contours on how key and common external shocks get propagated into landlocked developing economies, and thereafter get internalized. Attempt has been made to keep this report as qualitative as much as possible. There have been no attempts to estimate correlation, causation or even synchronization of different data sets. Instead, emphasis was placed on the narrative – how different events that first appear overseas affect the LLDCs.

A follow up report will be more technical and econometrically more engaging. It will be – by design – quantitative and built on some of the most interesting aspects of this current report. Every effort will be made to the extent possible to quantify impact as well as the size of individual propagation mechanisms. It will develop and offer some economic models whose robustness will be subjected to counter studies. It is from this second report that eventually the General Assembly-requested indicators will be identified and proposed for further discussion in a multilateral setup.

This report covered three types of external shocks: economic and financial shocks; social and political unrest-related shocks; and finally, environmental and climate change-related shocks. There is a long list of transmission channels through which external shocks stemming from these three sources could be transferred. The inflow of capital assets, international trade, migrant worker remittances, exchange rate, as well as policy prescriptions are just some of the propagation channels. This report examined official development assistance, external debt, and external trade, balance of payment, international reserves and migrant worker remittances as some of the financial transmission mechanisms.

Not only are LLDCs geographically disadvantaged because they do not have access to the sea, many of them are located in regions that are politically unstable. While there is evidence that countries tend to realize positive spill over benefits from economic growth experienced in their immediate and general neighbourhood, this is hardly true for landlocked developing countries. It is estimated that the global average effect for having a good neighbour that grows at 1 percent per year, induces nearly 0.4 percent growth in her neighbours. Over the years, simmering conflicts and full-fledged wars have ushered a series of development challenges to many LLDCs. Civil wars have resulted in the loss of life, human displacement and destruction of property. UNHCR report shows that there were over 1.2 million refugees in the LLDCs in the LLDCs. This was equivalent to 12.9 percent of the total global refugee population of 9.9 million. Indicative of internal turmoil, a full 42 percent of all persons in IDP situations-like around the world were located in the LLDCs. That landlocked developing countries bear disproportionately high refugee-burden, they handled about 42.6 percent of all refugee reception and transit logistics in 2012.

While some direct costs associated with hosting refugees are borne by the international community, host nations must content with increased strain on already overstretched infrastructure networks such as roads, railroad, and telecommunication, water as well as electricity grid. Host nations run the risk of being victims of illicit weapon inflows, spread of communicable diseases, and degrading of the environment, including sensitive ecosystems, and trans-boundary violence.

It is perhaps climate change and global warming that pose the gravest danger to LLDCs, since many of them are dryland, and depend on rain-fed agricultural sector for livelihood and employment. Climate change-related external shocks continue to drive people off their land. Such shocks are accelerating rural-urban migration, thereby creating a new set of challenges to ill-prepared cities. Besides being instrumental in an early warning mechanism, a set of external shock indicators could also be useful in designing a compensatory mechanism such as those touted under climate justice.

This report has shown that majority of – if not – all the LLDCs are vulnerable to external shocks of one kind or another. In view of this reality, it is necessary that the Post 2015 development agenda and the 10-year review of the APoA fully reflect this problem. Set against this reality, the report concurs with views expressed elsewhere that the future development programme for the LLDCs must go beyond the narrow and thematic focus on transport and transit challenges. It needs to be comprehensive and holistic in nature, taking into account emerging issues that include the developmental challenges that stem from external shocks.

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