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# UNDERSTANDING POLICY AND INSTITUTIONAL INNOVATIONS TO HARNESS KNOWLEDGE FOR THE REALIZATION OF THE MDGS IN AFRICA<sup>1</sup>

Pedro Conceicao and Ayodele Odusola

Regional Bureau for Africa, United Nations Development Programme (UNDP), New York.

## I Introduction:

Evidences from international publications on the MDGs have shown that knowledge, experience and the know-how of fast tracking the MDGs abound<sup>2</sup>. Africa is endowed with indigenous and local knowledge; however, such innovations are characterized with information asymmetry which weakens the widespread application of innovative ideas that could have transformed its economic and development landscape. Due to information asymmetry, we often prefer to look for innovations that are either inferior or of the same standards from distant locations but not easily adaptable to the African context. Due to the lack of a sharing network, most innovative ideas from the region have become localized and in some instances, the indigenous innovators adopt an indifference attitude, mostly leading to indirect restriction of the innovation, among the innovators and producers<sup>3</sup>. The lack of network for sharing innovative ideas has resulted into deficit in the incremental innovation progress in the continent.

A review of experiences across the continent has shown that new body of knowledge is being built around policies and institutional innovations that are driving progress on the Millennium Development Goals (MDGs). The emerging evidence tends to suggest that achieving the MDGs in the region requires a substantial reorientation of development policies and institutions to focus on the use of new and established processes and practices that have propelled progress across the various Goals and countries in Africa.

To be able to capture relevant changes taking place on the implementation of MDGs related interventions, innovations are looked at in three broad categories: in terms of *policy orientation* that have created conducive environment for progress, *business process* (covering marketing, financing and operational issues) and *products or the service* (focusing on organizational and social impact) – the three ps: policy, process and product. Three main broad areas are emphasized in addressing the issue of innovations on the MDGs: the goals on poverty reduction, education and health. They focus on one area each where the region is doing very well (education) and lagging behind (health goals) and having a moderate progress (poverty).

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<sup>1</sup> Being a paper presented during the *Expert Group Meeting on Harnessing Knowledge to Achieve the MDGs*; organized by the Economic Development and NEPAD Division, UNECA; United Nations Conference Centre, Addis Ababa, Ethiopia, 4-5 November 2010.

<sup>2</sup> See UNDP (2010 a and b)

<sup>3</sup> World Bank's IK Notes (2006) attributed two main reasons for why African indigenous knowledge have not been given adequate coverage. First, the innovations and discoveries they produce are mostly incremental because they do not carry high income gains. Second, culturally, there is little knowledge sharing due to lack of records and the application of such innovations in the absence of an organized framework.

With the way innovations on MDGs interventions are being adopted in some African countries, if these innovative ideas are rapidly and widely spread across the continent, Africa would be on track to achieve most of the MDGs—perhaps not by 2015, but in the not too distant future. This presentation is aimed at shedding some lights on what has been driving the progress on poverty, education and the health MDGs in the region and how this could be harnessed to further deepen progress. This paper explores how innovations have accelerated progress on the MDGs in Africa and how they can be harnessed to deepen MDGs progress in the continent. Specifically, this paper provides hindsight into key innovations that have been driving MDGs progress in the areas of poverty reduction, universal access to primary education as well improving child and maternal health in the region.

The paper is organized into five sections. Following the introduction is the description of knowledge and innovations in the context of national development in section two while institutional and policy innovations driving the MDGs are addressed in section three. Section four focuses on potential for harnessing innovations for rapid progress on the MDGs and section concludes the paper.

## **II Knowledge and innovations in the context of national development**

Innovation has been defined in several ways. It is generally defined to mean a change in the process of doing something better or the useful application of new or old ideas, inventions or discoveries<sup>4</sup>. This could refer to incremental or radical and revolutionary changes in thinking, products, processes, or organizations that lead to improvement in doing things or better results. Schumpeter<sup>5</sup> defines innovation as something that brings about a change in a way that is substantially different from the original situation. Such a change, in economics realm, must increase value to both customers and or producers. In the Schumperian sense, innovation leading to increased productivity is the fundamental source of increasing wealth in an economy. As such, any factor driving such innovations are of critical value to policy makers. This is why proponents of innovation economics stress using public policy to spur innovation to drive growth and development.

Similarly, the Advisory Committee on Measuring Innovation defines *innovation* as “the design, invention or development and/or implementation of new or altered products, services, processes, systems, organizational structures or business models for the purpose of creating new value for customers and financial returns for the firm” (see ACMI, 2008). Johnson et al 2003 defines innovation as a continuous cumulative process involving not only radical and incremental innovation but also the diffusion, absorption and use of innovation, which includes interactive learning taking place in connection with ongoing activities *such as the MDGs*.

The Millennium Project (2005) underscores that knowledge and institutional adjustment or innovations are central to development of any country. In fact, it considers innovation as the engine of development and that policies and institutions create the environment for innovations

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<sup>4</sup> See [McKeown](#), Max (2008). *The Truth About Innovation*. London, UK: Prentice Hall.

<sup>555</sup> Schumpeter, J,A, (1961): *The Theory of Economic Development: An Enquiry into Profits, Capital, Credit, Interest and the Business Cycle*, translated from the German by Redvers Opie (1961), New York: OUP.

to thrive. Government, the private sector and the knowledge institutions are larger part of the innovations system. Within the realm of a sectoral innovation system, KIT (2006) defines it as the links between actors, interactive learning processes, and the policy and institutional contexts that govern the system in order to better understand the generation, dissemination and application of knowledge.

As part of its strategy to support progress towards the MDGs in developing countries, the Government of America considers innovation to hinge on three key elements: (i) the development and application of new technologies, approaches, and methods to address human development needs; (ii) the development of new ways to deliver existing solutions to more people, more cheaply and more quickly; and (iii) the introduction of new business models to make aid agencies and international development architecture more effective (Government of America, 2010).

This paper takes a broad sense of innovation that focuses on integrating policy, institutional and organizational innovations. It reviews various improved environment, approaches and methods of delivery services towards the realization of the MDGs. The paper sees innovation as a necessary part of economic development in specific and the MDGs in general. It is any idea or devise that corrects deficiencies (partly or wholly) of the past in a way that contributes to progress in any of the MDGs targets. This could be policy or institution or organizational.

Policy and institutional innovations, when effectively implemented, could manifest in a number of ways. First, it could empower individuals, increase people's capacity to tap effectively into markets and hold governments more accountable. Second, when innovations are targeted at enhancing the production process and better service delivery, such gains in productivity often lead to higher economic growth and facilitate poverty reduction as well as make development more sustainable. Third is the synergy between the first and second manifestations which facilitates human needs as enumerated in the MDGs (education, health and livelihoods).

Innovations, when effectively managed, facilitate knowledge transfer and encourage further innovations, they catalyze the emergence of new technologies and businesses as well as create joint ventures and other income generating activities. Innovation as an integral component of the knowledge system, ensures continuous and collective learning, nurturing a willingness among innovators to connect and making innovation continuous and additive. Promoting better knowledge and approaches of doing things is central to achieving the MDGs in Sub-Saharan Africa.

### **III Institutional and policy innovations driving the MDGs in Africa**

Africa made appreciable progress over the last decade, after a period of long stagnation, as manifested in encouraging rates of economic growth, a favorable global economic climate until the recent global financial crisis, sound macro-economic policies management, decline in number of countries in conflicts, and stronger governance mechanisms. These contributed to Africa's

improving progress on the MDGs across the various grouping of countries (least developed, low or middle income countries). Twelve out of 20 countries that made absolute progress among developing countries are from Africa<sup>6</sup>. The region has advanced on a number of the MDGs (e.g., education, gender and safe drinking water) but progress is uneven across and within countries. The achievement of each of the Goals varies from rural to urban areas and among women and children across countries with varying level of disparity. However, progress has been particularly slow on the health MDGs, productive employment, biodiversity loss and sanitation.

In spite of the avalanche of institutional and policy innovations driving progress in many African countries, there is dearth of knowledge sharing mechanism that could up scale the performance on the MDGs. Many countries are searching for good practices from distant countries whereas these experiences are available around them (even with their neighbours). This paper intends to share some of the good practices driving the MDGs in Africa that other countries can learn from. In documenting these innovations, the paper focuses on poverty reduction; access to primary education and the health MDGs. Innovations are grouped into two: cross cutting and sectoral innovations as highlighted below.

## **Cross-cutting Innovations**

### ***Strong political support and leadership create momentum***

Political leadership taking the lead on MDGs related issues have contributed to progress. This goes beyond integrating MDGs into national development plans but following through on implementation of targeted interventions and driving the overall development process. Countries have exhibited commitment through a number of initiatives such as alignment between the MDGs and national development frameworks (e.g., development strategies, poverty reduction strategy documents), MDGs interventions received explicit and special attention in the annual national budgets, substantive monitoring integrated into national development management instruments, and in some situations establishment of parliamentary committees on the MDGs and poverty reduction. Countries that have remained committed to attaining the MDGs tend to show progress. However, the focus of commitment varies from country to country – some focus attention on education, several on poverty reduction, a few on HIV/AIDS, others on gender.

Countries where political leaders such as Presidents or Prime Ministers assumed the leading role in the process has appreciable impact. For instance, it resulted into rapid reductions in poverty in Seychelles, Ghana and Cape Verde; substantial improvement in education in Ethiopia, Malawi, Mozambique and Tanzania as well as improved performance HIV/AIDS pandemic in Uganda, Rwanda and Eritrea. Specifically, strong political commitment is a major factor in the Senegal's achievement in the Nutrition Enhancement Project which as at 2009 had reached about 40 percent of the affected population. It enhanced visibility and impact of the nutrition programme

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<sup>6</sup> Overseas Development Institute (ODI) (2010), 'Millennium Development Goals Report Card: Learning from Experience', ODI

to the extent that it was adjudged the best in reducing stunting rate in sub-Saharan Africa (from 22 per cent in 1990 to 14 percent in 2005)<sup>7</sup>. The Health Extension Programme in Ethiopia also witnessed strong political support which led to the recruitment and training of over 31,000 health extension workers and establishment of about 15,000 health posts. It also supported the performance in contraceptive prevalence rate in Niger and child mortality in Zambia<sup>8</sup> (World Bank, 2010).

### ***Economic growth matters but not sufficient***

Many African economies have grown appreciably in the last decade or so but not all of them have been able to translate this growth into better living conditions and well being of the poor. For example, South Africa, Nigeria, Ethiopia and Mozambique experienced growth of 5 percent and above between 2003 and 2008 but have not translated this into commensurate poverty reduction. While growth and macroeconomic stability are necessary for reaching the MDGs in terms of raising the revenue base for government to finance MDGs related interventions and additional incomes for households, not much has been achieved in terms of distributing benefits of growth to the poor and vulnerable groups. Still, countries such as a Seychelles, Mauritius, Ghana and Uganda have shown that it is possible to turn robust growth into significant poverty reductions. In these countries a combination of broad based and well targeted interventions appear to have been key drivers in ensuring that the expansion of income reduces poverty. In the case in Ghana and Seychelles, growth was accompanied with nation-wide infrastructure expansion (including road, electricity, water, basic health and educational facilities) and interventions that were targeted at farmers and youths in Ghana and a robust welfare package in the form of old age pensions, sickness benefits, and special assistance programme for the disadvantaged groups such as the chronically ill, the physically and mentally challenged people in Seychelles.

### ***Access to physical infrastructure***

Countries with improved network of physical infrastructure have also impacted positively on the MDGs in Africa. Mauritius is a case in point<sup>9</sup>. To a large extent, substantial expansion and maintenance of road and rail networks, electricity generation and coverage, water reticulation and distribution, communication and provision of low-cost housing have had spillover effects on the progress towards the MDGs especially poverty reduction and empowerment of the poor.

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<sup>5</sup>. As against 43 percent for Sub-Saharan Africa in 2005 (Teller and Alva, 2008). Other countries that have made remarkable progress on stunting include Namibia, Togo, Uganda, Eritrea, Tanzania, Botswana, Gabon and Gambia (Teller and Alva, 2008).

<sup>8</sup> Contraceptive prevalence rate increased from 2.3% in 1992 to 4.4% and 15% in 2006 and 2010 respectively while child mortality and severe anemia dropped by 29% and 10% between 2006 and 2008 in Zambia (World Bank, 2010).

<sup>9</sup> Due to access to infrastructure and efficient service delivery, almost all the population have access to safe drinking water and sanitation in Mauritius.

Constraints associated to supply side of service delivery was mentioned as serious impediments to moving forward in a number of countries including Uganda, Nigeria, South Africa and many other countries. Post conflict countries such as Liberia, Sierra Leone, Angola, DRC and Burundi mentioned infrastructure deficit an important impediment. To address this challenge, Ghana for instance devoted substantial resources into capital spending focusing on rehabilitating and construction of roads, water, school and hospital facilities. This made development expenditure to rise from 0.63% of GDP in 2002 to 5.83% of GDP in 2008. This contributed to the translation of economic growth into rapid poverty reduction in the country. A similar trend of investing in infrastructure is emerging in South Africa with particular focus on road, rail and water reticulation expansion.

*Improved accountability through result-based and participatory monitoring and evaluation:*

The establishment of the African Peer Review Mechanism (APRM) in 2003 is systematically changing the landscape of development management in the continent. Although it is an instrument voluntarily acceded to by member states of the African Union (AU) as a self-monitoring initiative for good governance (conformity to the values, principles, codes and standards enshrined in the Declaration on Democracy, Political, Economic and Corporate Governance), the findings from the effort are shaping national and regional debates and policy decision making. The APRM approach is lengthy because of the extensive process of planning and consultations among multiple stakeholders (which has allowed for credibility and successes) and recommendations that drive national programme of actions. This African home-grown initiative has substantially generated high level political dialogue at the country and regional levels, strengthened the institutions and systems of governance, member states learning from each other and strengthened partnership on development.

Several countries have also introduced effective tracking of development outcomes through the involvement of broad-based stakeholders in monitoring and evaluating development outcomes along the key deliverables indicated annually appropriated budgets. Mali provides a good example on participatory planning and monitoring processes especially on PRSP using 60 multi-sectoral indicators of impact and outcomes (disaggregated on gender basis, and have been fully mainstreamed into the national statistical system. The General Office of National Control was established to ensure relevance, coherence and governance of the initiative. As espoused by Diarra and Ndamobissi (2010), the monitoring and evaluation system has led to improvement in policies and programmes, evidence-based and result-oriented approaches to planning, budgeting and reporting. The shift away from poverty monitoring to budget and performance monitoring for accountability is changing the landscape of development management in the country (Smith et al, 2010).

The innovative idea of the civil society budget work is yielding substantial results: findings from education budget are being used to challenge government over education budget in order to hold them accountable. In Malawi pre- and post- budget analysis is providing information for budget advocacy, district –based budget tracking and increased share of education in national budgets. Education budget tracking has led to exposure of corrupt district education officials, head



teachers and contractors in Uganda while in Ghana community scoreboards have been used to track school budgets, assess education service delivery, exposed 'hidden' cost of education in spite of the free education policy and increased parental participation schools management. Information from generated from local education budget tracking was used to inform national level; advocacy and ensured public display of schools budgets in Kenya (CEF, 2008).

### ***MDGs focused policies are necessary to galvanize momentum and actions***

Policies have been major drivers of success in a number of countries<sup>10</sup>. High level awareness and advocacy emanated from series of policy innovations. MDGs based planning and development strategies have gained clout over the past one decade and have driven the development of Poverty Reduction Strategy Papers in a number of countries. A few countries have established MDGs ministries (e.g., Women Affairs), commissions or special units while some formed Presidential and Parliamentary Committees to advocate for, implement or monitor MDGs related interventions. Some are sectoral based policies such as the Universal Primary or Basic Education in Ethiopia, Benin and Swaziland, Educational Fund/Tax in Nigeria and The Gambia, School Feeding Programmes in Namibia, Emergency Obstetric Care and Safe Motherhood Initiative and others are broad based such as livelihood and empowerment programmes in Ghana and virtual poverty funds in Nigeria. The explicit recognition of social welfare system in Seychelles' constitution makes protection of the vulnerable and the underprivileged a direct responsibility of government which contributed to absence of extreme poverty in the country while education is constitutionally recognized as a fundamental human right. Policy based initiatives have also served as key drivers in a number of countries like Ghana, Nigeria, Malawi and Rwanda, to mention a few.

### **Sectoral Innovations**

To effectively capture the innovations, this section focuses on three main broad areas on the MDGs: the goals on poverty reduction, education and health. This provides a vivid example of some innovations taking place in a goal where the region is doing very well (education), having a moderate progress (poverty), and lagging behind (health goals).The framework of analyzing the set of innovations is how the new way of doing things contribute to policy orientation, business process and products or service delivery as well as its organizational, economic or social impact.

### **Efforts towards reducing poverty and hunger**

***Scaling up development budget for enhance physical infrastructure.*** To promote rapid economic growth that will be needed to finance poverty reduction efforts, many countries have increased the share of development spending in recent times to bridge identified socio-economic and physical development challenges. Ghana, for instance, increased the share of development

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<sup>10</sup> Policy pronouncement is a double edged sword. While it drives progress in many countries (Gender policy in South Africa, Swaziland and Rwanda, HIV/AIDS in Togo and Senegal, and water policy in Cote d'Ivoire), the land reform policy in Zimbabwe contributed to the economic decline and worsening trend of MDGs targets.

spending on the total budget from 0.63 percent of GDP in 2002 to 5.83 percent of GDP in 2008 to support such programmes as small-scale projects in agriculture, industry and mining, rural energy, micro credit, employment generation, and specific nutrition improvement initiatives. The South Africa's nation-wide investment on the expansion of physical infrastructure in the past three years, acclaimed to be one of the largest in the world, substantially increased spending on development programmes. A similar development is occurring in many other countries.

***Expanding and deepening social safety nets for the most vulnerable groups:*** Many African countries have established social protection schemes to support the vulnerable segments of the population. For instance, protection of the poor and the marginalized is a fundamental right as enshrined in Seychelles' constitution; while the South Africa expansive social protection (covering, as at early 2010, about 13 million people – including a monthly old pension of US\$109 for women over 60 years and men over 65 years) also has strong policy and legal support. The virtual poverty fund in Nigeria also provided strong support for poverty reduction and MDGs related spending (leading to recruitment of 45,000 teachers and training of 145,000 teachers in 2008, among many other outputs). Other countries that have established social safety nets of one form or another include Lesotho (e.g., provision of about \$40 per month to 70 years and above), Swaziland (e.g., bursary scheme for orphaned and vulnerable children), Ghana (including capitation grant and nutritional supplement), and Cape Verde (e.g., provision of €27 per month as pension to 7500 people considered to be the most vulnerable).

***Enhanced capacity for knowledge application has improved through the use of agricultural input services.*** Countries such as Ghana, Uganda, Tanzania and Rwanda were able to use agriculture to reduce rural poverty because some level of innovations through availability of inputs, extension services, credit and output markets that positively enhanced farm level productivity growth. This has enhanced innovation capability for accessing, adapting and applying world-wide and local knowledge that have transformed agricultural practices in Africa (Larsen et al, 2009).

***The use of informal approaches of service delivery to supplement orthodox and formal approaches has produced remarkable progress in a number of countries across the MDGs.*** For instance, countries where smallholders farmers' access to credits from the formal financial system has proved very difficult have led to the emergence of an informal services deliveries linked to value chain process that have produced excellent results. Input suppliers and output buyers provided loans and credits to smallholder farmers during the cultivation and planting seasons and recover their investments when farmers delivered farm products. This model has worked excellently in Kenya's Central Province and Kilimanjaro region of Tanzania (Odame, Musyoka and Kere, 2008; Lynam and Theus, 2009). A similar initiative called contract farming<sup>11</sup> in Nigeria has ensured guaranteed sustainable supply of raw materials, promoted standards and quality of products, boosted rural economy and promoted pro-poor growth. As pointed out by Olomola (2010), contract farming increased per capita income of smallholder

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<sup>11</sup>Contract farming is a contractual arrangement between input suppliers/output buyers and smallholder farmers where the former provides inputs and or finance to the latter primarily for dedicated farming activities and the latter pays back the former by selling the farm produce to the former.

farmers by 20 percent, 48 percent and 61 percent for cotton, ginger and rice farmers respectively in Nigeria, Although it declined by an average of 56 percent for soyabeans smallholder farmers, on average however, the net effect is substantially positive.

Table 1: Impact of contract farming on per capita income of smallholder farmers in Nigeria

Crops	Change in per capita income (Nigerian naira)	Percentage change of per capita income
Cotton	13,328	20
Ginger	39,656	48
Rice	13,957	61
Soyabean	-33,968	-56

Source: Computed and compiled from Olomola (2010)

**Promoting demand-driven research and growing partnership between agribusiness firms and farmers associations:** A review of these various approaches by SWAC (2005) reveals that specific agricultural innovations present regional opportunities that could be explored to address poverty and hunger as well as generate income to induce access to services relating to the other MDGs. The implementation by the West African Rice Development Association (WARDA) of high-yielding rice varieties NERICA (New Rice for Africa) and the technological development of post-harvest processing using materials made by local blacksmiths in Niger and Mali have helped productivity rise significantly. For instance in Mali, yields rose from 3 tonnes per hectare in the 1990s to about 6 tonnes in 2005<sup>12</sup>. Besides, strengthening of partnerships between producer organizations and agribusiness have encouraged the adoption of new high-yielding technologies in agricultural production. For example, Ghana’s pineapple yields have increased by approximately 20 percent and exports increased 10-folds between 1993 and 2004. The partnership between agribusiness firms (oil palm) and family farmers in Nigeria helped farmers to acquire more productive and profitable palm planting materials. For instance the Okomu Palm Oil Company has been able to reduce costs linked to expanding palm oil production plantations by working with a large number of small family farms(SWAC, 2005).

**Resuscitation and refinement of fertilizer subsidy programme:** The need to enhance agricultural productivity and reduce poverty in the region contributed to this renewed interest agricultural subsidy<sup>13</sup>. While some countries introduced a refined fertilizer distribution programme, others, based on lessons from past mistakes, adopted voucher distribution for purchase of fertilizers, seeds, and other agricultural inputs (e.g., in Malawi, Ghana, Nigeria, Tanzania, Zambia and Kenya). (See Box 1). As opposed to the past universal distribution of fertilizer through public monopolies, the new approach adopted a temporary intervention targeted at poor smallholders and implemented through conscious effort to support private fertilizer markets. As argued by Banful (2010) and Minot and Benson (2009), the use of agricultural input vouchers has become a

<sup>12</sup> See <http://www.warda.org/nerica/technology.htm> .

<sup>13</sup> Fertilizer intensity use is very low in Africa. In 2002, the fertilizer nutrient consumption in SSA was only 8 kilogram per hectare as opposed to 101 kilogram per hectare in South Asia (Morris et al 2007 and Banful 2010).

multi-dimensional mechanism for targeting subsidies to smallholder farmers, developing demand for private fertilizer markets and building relationship between agricultural input dealers and financial institutions. In some countries, public-private partnership has been used to exploit private sector efficiency and avoid distorting private markets. Government programs used market-based innovations such as bid-tender system to source fertilizer through the private sector. The adoption of one or more these innovations, both in program design and implementation is aimed at avoiding the problems that plagued the past programs. The programs have boosted fertilizer use, increase productivity and in some situation developed private fertilizer markets<sup>14</sup>. There is avalanche of evidence that effective use of fertilizers lead to higher productivity. For instance, evidence from Ayoola (2010), shows that fertilizer use in Nigeria multiplies returns to farmers by a factor ranging between 2.1 and 14.6.

### **Box 1: Re-emergence of Fertilizer Subsidy Programme in Sub-Saharan Africa**

Given the critical role of agriculture in promoting sustained growth and poverty reduction in Africa, the need to enhance agricultural productivity has become an important policy objective of many governments. To achieve this, fertilizer distribution which was discontinued in the 1980s and 1990s is seen as a strategic option. The Malawian Government pioneered the return to large scale fertilizer subsidies in 1998 as Nigeria resumed its in 1999. In Zambia, the Food Security Pack program which distributed seeds and fertilizers to households was started in 2000. Tanzania started this in 2003 but introduced a voucher-based scheme in 2008. Kenya, which has been rated as one of the few countries that have succeeded in developing their private agriculture input market also re-launched its fertilizer subsidy program in 2006. A national voucher-based fertilizer subsidy was introduced in Ghana in 2008.

**Source:** Banful, 2010.

*The transformation taking place in the traditional land-tenure system in many countries in Africa is impacting positively on the MDGs:* Devolution of land to local community has led to better distribution of and access to cultivable agricultural land and increase in economic activities in a number of countries. The Gambia provides a good example. The country has a comparative advantage in the production of rice, mostly done by women<sup>15</sup>. Arising from the

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<sup>14</sup> Although these innovations have changed the landscape of subsidy management in the region, yet unless fertilizer subsidies are geared towards correcting for severe information and credit market failures, they are still prone to substantial inefficiencies that could outweigh the benefits associated with the program. The number of vouchers printed and distributed in Malawi is still shrouded in secrecy (Holden and Lundunka, 2010) while its distribution in Ghana was targeted at buying political votes (Banful, 2010).

<sup>15</sup> In the Gambia women are the traditional rice growers but their activities have been seriously hindered by limited access to more land. Within the traditional land-holding system, most of the lowland areas suitable for rice growing were owned and controlled by a small number of influential farmers, called, the original founder-settlers. Because they do not have access to enough labour to exploit the land, they allowed some poor landless farmers, most of

failure of the strategy to build capital-intensive production systems using high-input technology in the 1980 due to non-sustainability (heavily reliance on imported technology, substantial foreign technical assistance, scarce foreign exchange, and weak agricultural institutions), a policy of engaging poor rural communities in the planning and implementation of rural land holding was initiated. Between 1997 and 2005, Lowlands Agricultural Development Programme (LADEP) worked as a catalyst to bring about this change in the traditional land-tenure system. The LADEP held discussions with communities to devolve land ownership from the founder-settlers to those landless poor farmers (mostly women) willing to participate in the reclamation of inaccessible land<sup>16</sup>. The arrangement created a win-win situation to founder-settlers and farmers. Individually owned land was first devolved to the community, which distributed it equitably among those individuals, mainly women, participating in land reclamation. Through the programme, the LADEP invested in infrastructure that opened up the inaccessible lands for use: the founder-settlers had access to 'idle lands' with difficult physical access while presently accessible lands were distributed to landless farmers especially women farmers that agreed to provide labour, as a group, to the founder-settlers. This gave people a clear incentive to contribute labour for reclamation in return for a secure landholding, and to assume responsibility for infrastructure operation and management after the end of the programme. Discussions with, and devolution of land to, communities gained legal value under traditional law. The change in the traditional landholding system has allowed the 'labour force of women without land' to unite with 'landowners without labour' for enhanced rice production, women empowerment (about 22,000 women now had access to land), increased livelihoods and reduction in poverty and inequality. The LADEP approach to land tenure is now widely accepted in the country and is ready for scaling up to the national level.

***Simple, locally-owned technology traditional soil and water conservation practices are changing lives in Niger and Burkina Faso.*** The use of *tassa* (traditional planting pits in drought prone areas) in Niger based on lessons from Burkina Faso's tour of 13 farmers from Niger, was instrumental in bringing a total of 4,000 ha back into production thereby mitigating agricultural risk and improving household food security for many impoverished families in the Niger. The adoption of this locally technology, through the help of IFAD, is spreading quite fast within the region as a result of doubling of yields, rehabilitation of barren land, easy maintenance and easy weeding and thinning. This approach is now a common place in Burkina Faso, Niger and Cape Verde<sup>17</sup>. The *tassa* technique has become an integral part of the local farming in these countries and it is adding an additional 2-3 ha per year to some holdings. It has led to the emergence of a new industry of young day-labourers, who have mastered the technique, and now worked for local farmers. The suitability of the technique to the changing local context, its simplicity and cheapness made it very attractive for adoption.

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whom were women, to borrow and work the land seasonally. The system of borrowing land and returning it annually to the owners reduced the incentives to improve productivity (Cleveringa, Kay and Cohen 2009).

<sup>16</sup> Substantial part of the lands was idle because of difficult physical access that hindered their cultivation.

<sup>17</sup> See <http://www.ifad.org/english/water/innawat/cases/niger.htm>

***The adoption of participatory approach to irrigation development in Tanzania is generating rewards to farmers.*** The Government in collaboration with IFAD, in 2000, as part of its six-year programme to support the development of smallholder irrigation schemes in semi-arid, marginal and drought prone areas and rehabilitation of some 12,000 ha of land, to the benefit of more than 15,000 people for an enhanced livelihood of the poor rural people. The project was undertaken to harness the strengths of communities to fully participate in the planning, construction and, ultimately, the operation and maintenance of the irrigation schemes; choose simple designs and construction methods that could easily be operated and maintained by farmers; ensure a good return on investment (in terms of productivity and income) and promoted cost recovery. The programme targeted the poorest farming families, particularly those headed by women, whose crop yields were low and depended on income from casual labour for up to eight months a year. The programme led to the construction of 42 irrigation schemes (with many other ones underway); construction of over 327 kilometres of roads and about 50 village road groups formed to oversee road maintenance. In addition, the capacity of 12 district councils and of government officers was developed leading to the training of about 24,000 farmers. The Water User Associations (WUAs) were involved in the process. The proportion of women with plots and membership in WUAs is now over 30 per cent. The project demonstrated that supplementary irrigation of paddy could be financially viable and economically attractive; each irrigation scheme was at a cost of an average cost of US\$1,000-2,000/ha as opposed to the approximately US\$10,000/ha required at that time to build larger irrigation schemes. In contrast with an annual average yield of about 1.8 to 2.3 tons per hectare (ha), as at 2004, this project led to average rice yields of 4 tons/ha and farm incomes grew proportionately as well. A review of the programme in 2005 showed an improvement in household food security for the most impoverished as a result of increased crop yields<sup>18</sup>.

### **Efforts on achieving universal primary education**

***Continuous increase in the allocation of public resources to education:*** Mostly influenced by the 2001 Dakar Framework of Action for Education, many countries have increased allocation of resources to the sector. In Ethiopia, for instance, annual budget allocation to education averaged 20.6 percent between 2002 and 2008; it rose from 15% in 2007 to 20.0% in 2009/10 for Zambia; it ranged between 23.7% and 29.6% between 2005 and 2009 in Kenya, it averaged 25% of total budget between 2000 and 2006 in Swaziland, it was as high as 23% in 2004 in Benin while in Namibia it is about 20.0 percent since 1990. Part of these resources were devoted to upgrading and expanding infrastructures, training of teachers, provision of learning tools and creating incentives for teachers.

### ***Decentralization of primary educational management system has transformed service delivery.***

The management and administration of the primary education (and in some countries, secondary, technical and vocational schools) have been decentralized to the lower levels of government for efficiency and effectiveness (Mauritania, South Africa, Nigeria and Ethiopia). In other countries like Rwanda, Seychelles and Tanzania, the involvement of Parent Teachers Association and

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<sup>18</sup> See <http://www.ifad.org/english/water/innawat/cases/tanzania.htm>

communities in the management of schools (especially in monitoring and evaluating schools performances) have reinforced success due to improved governance. Tracking of education spending in Tanzania for instance yielded positive results.

***Adoption of non-traditional model of primary education delivery has driven progress on primary enrolment and educational parity in some countries.*** This takes the form of mobile, pastoral, coastal and Arabic educational programme which took into consideration peculiarities of different geographic regions (e.g., Nigeria, Ethiopia and The Gambia) as well as adult literacy programmes. Both formal and informal educational systems have been integrated into one in a number of countries while special funds were created for education: education tax fund in Nigeria and Ghana, as well as Girls Education Trust Fund in the Gambia. These innovative ideas facilitated access to a large number of children in remote areas where the formal school system could not reach while the various funds bridged education funding gaps in many countries.

***Adoption of compulsory and free universal primary/basic education.*** Many countries such as Benin, DRC, Nigeria, Namibia and Mauritius adopted compulsory primary education. Uganda, for instance, introduced compulsory education in vulnerable and trouble-torn region of Karamoja<sup>19</sup>. For countries that could not afford nation-wide compulsory education, the Ugandan targeted approach could be a viable option. These were complemented with additional policies such as School Feeding Programme (e.g., Namibia and Kenya), Girls' Friendly Education Programme (The Gambia) and special focus on children with disability (Ghana and Seychelles).

***Countries are devising series of strategies to address indirect cost of education:*** Introduction of free education across almost all African countries has positively influenced rapid enrolment rate in many countries. However indirect education expenses still serve as an impediment to poor family sending their children and wards to schools. Several innovative approaches have been introduced to tackle this in some countries. For instance free feeding programme has been introduced in several countries (Angola in 2005, Ghana in 2006). Ghana introduced free bus riding for pupils in uniform for those schooling far away from their residence (where more than 25,000 pupils benefited from the programme daily)<sup>20</sup>. Countries such as Malawi, Tanzania and Zambia are doing away with the requirement for school uniforms (Riddell, 2003) and Ghana is adopting a similar policy as Botswana is providing free uniform, food every month and transport to and from school to orphans (Moko, et al, 2009). In countries such as Botswana, Burkina Faso and the Gambia provision of free textbooks to pupils is part of the programme.

***NGOs and private sector are complementing government efforts to enhance quality of education:*** To increase learning opportunities for Grade 10 girl learners in South Africa, the

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<sup>19</sup> see (<http://www.alertnet.org/thenews/newsdesk/L18789335.htm>).

<sup>20</sup> Due to introduction of free primary education in the country and within just *two academic years, enrolment in public basic schools surged from 4.2 million to 5.4 million. The gross enrolment ratio in primary schools reached an all-time high of 92.7% . Moko et al (2009) and .*<http://www.mofep.gov.gh/documents/LoanMassTransport.pdf> )

M4Girls project run by Mindset Network in partnership with Nokia was initiated in April 2008 for girls from historically disadvantaged backgrounds who tend to be weaker performers in mathematics. It uses mobile phone technology as the platform to distribute educational content to schools and being piloted in two schools in the North West Province of South Africa. As a pilot, twenty girl-learners were issued with a Nokia 6300 mobile phones loaded with curriculum-aligned Mathematics content developed by Mindset. Preliminary evaluation indicated that the projective is innovatively enhancing mathematical proficiency and cell phone literacy<sup>21</sup>. This approach could be used for primary education for enhanced quality. Also in Rwanda, the partnership among the government, Agile Learning Company and Microsoft, since 2007 introduced Education Management Information System which is transforming public education service delivery. The regularly updated and easily accessible education information on the number of students attending in each school, grades, teachers, and infrastructure has been facilitating allocation of resources based on local needs; helping the process of decentralizing educational management; and enhancing better planning of human capacity building.

***The NEPAD e-Schools project is revolutionizing the school system in many countries.*** Since 2006, implemented in partnership with African governments and private sector partners is aimed at overcoming structural barriers to the use of computers in African schools. The project provides a computer lab with computers, software, internet connectivity, maintenance, and a digital Smart Board connected to a projector which allows users to input directly on the screen. As at 2009 in Rwanda, this project has trained teachers and school administrators to use the equipment for teaching and learning and to help manage the school with 733 students of Gisenyi's e-School having access to 24 computers and can surf internet. This project, with Microsoft's support, has already been implemented in over 25 schools in Kenya, Lesotho, Mauritius, Cameroon, Senegal, Mozambique and Rwanda and has reached out to over 1,000 teachers and 20,000 students. Its ultimate aim is to connect 600,000 primary and secondary schools in Africa<sup>22</sup>.

***Early child care and development is enhancing enrolment and performance in primary schools.*** Although early child care and education (ECCE) is not part of MDGs, it provides impetus to easy transition to and quality of primary schools outputs. One of the reasons for excellent performance on primary school enrolment rate and the quality of education services in Mauritius and the Seychelles is the adequate attention given to ECCE. As at 2007, Mauritius provided early childhood education to 94 per cent of children aged between 3 and 5 years and by 2004, Seychelles was able to provide this level of education to 85 per cent of children aged 3.5 to 5 years. As stated by Moko et al (2009), this performance was made possible by utilizing

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<sup>21</sup>For more information on the project see

[www.sagoodnews.co.za/education/innovation\\_project\\_uses\\_cell\\_phones\\_to\\_teach\\_maths.html](http://www.sagoodnews.co.za/education/innovation_project_uses_cell_phones_to_teach_maths.html)

<sup>22</sup> "Technology Transforming Education in Africa", [http:// download.microsoft.com/Tech\\_Transform\\_Edu\\_Africa\\_%20Sol\\_Overview.pdf](http://download.microsoft.com/Tech_Transform_Edu_Africa_%20Sol_Overview.pdf)



classroom space in some primary schools for ECCE; providing financial assistance to private providers through soft loans; and constructing pre-primary school in primary school facilities.

***Refinement of the primary school curriculum to align with current reality.*** Countries such as Botswana have incorporated HIV/AIDS awareness campaign into the primary school curriculum and emphasizing moral education as opposed to religious education (Moko et al, 2009).

### **The silent drivers of the transformation in the health MDGs**

Although the health MDGs constitute a major challenge to Africa, yet substantial progress has been made in some countries, including Tanzania, Sao Tome and Principe, Eritrea and Cape Verde on infant and child health; Senegal on improved nutrition; and Niger on the use of modern contraceptives for family planning. Countries such as Cape Verde and Mozambique have made serious improvement on maternal health while Rwanda, Malawi, Ethiopia, and the Gambia have substantially reduced child mortality by 25 to 47 percent in the past one decade (UNDP, 2010b; World Bank, 2010). These remarkable results are as a combination of many factors such as equitable access to health services, evidence-based decision making, health systems reforms, resource availability, behavior change, country ownership, and donor coordination, brought about by innovative ways of doing things.

***Strong leadership, mobilization of international support and coordinated multi-sectoral approach*** are driving progress on the HIV/AIDS in such countries as Mali, Togo and Senegal. Strong emphasis was also put on building capacity of public sector and CSOs as well as productive partnership across key actors (government, CSOs, private sector and development partners).

***Well focused policies are transforming health delivery in key areas.*** For instance, in South Africa the end of the apartheid in 1994 ushered in mass exodus of medical practitioners to other countries which led to 31% of public health posts unfilled nationally and about 40% of posts in the Free State and 67% of posts in Mpumalanga remained vacant. The situation in rural areas was more daunting. The Government of South Africa introduced a range of policy initiatives including the rural and scarce skills allowances and mandatory community service for all doctors and health personnel (Keegan and Tollmani, 2008).

***Innovative mechanism for financing primary health care is making waves in some countries.*** The establishment of 'health basket' funds from many development partners contributed to the growing volume of resources available to pursue government focus on improved primary health care. Pooling resources together to prosecute national development priorities reduced erstwhile transaction costs and duplications associated to multiple implementation of similar project while at the same time pooled expertise together through Sector Wide Approach (SWAPs) reinforced performance. This contributed immensely to the progress on child and maternal health in Tanzania. For instance, infant mortality fell by over 40 percent in Tanzania, from 99 deaths per 1,000 live births in 1999 to 58 in 2007-08 while Under-five mortality declined from 146 deaths per 1,000 live births to 91 (World Bank, 2010). The

widespread success in Rwanda<sup>23</sup> was attributed to the country's innovative health sector reforms, particularly its results-based financing for health facilities and more decentralized decision-making.

***Well targeted community-based health insurance schemes have is deepening progress.*** Offering low-cost health insurance to low income households is another innovative method of financing health care system in Africa through healthcare provision, guarantee treatment of HIV/AIDS and avoid the out-of-pocket health expenses that are beyond the reach of the poor. Risk pools through community health insurance scheme, mostly subsidized at the beginning, offers degree of social protection to those who enrolled especially in Senegal, Rwanda, Uganda and Ghana (Okello and Feeley, 2004) and Namibia (Brookings, 2007). In Ghana, for instance, within five years of the take-off of the National Health Insurance Act, the district-wide mutual health insurance schemes as the end of 2007 covered over 8 million people in Ghana representing 42% of the entire population<sup>24</sup>. As reiterated in the World Bank (2010), about 70 percent of the insured, including children and pregnant women, are exempt from paying premiums. It has also produced positive impact: as reported from the 2009 DHS, at least 90 percent of pregnant women use antenatal care services, and births attended by skilled health staff rose from 40 percent (1990) to 59 percent (2008). Community health insurance scheme is also well established in other countries including Botswana and Malawi.

***Innovations in the health MDGs have been driven by strong partnership between/among government, CSOs, private sector and development partners.*** Capitation grant or loan has provided enhance service delivery both in education and health in some African countries. While Ghana is known for capitation grant to schools, the piloted capital funding for franchisees or service providers to start up or improve the quality of their health programs in Kenya is a key feature of the Kisumu Medical and Educational Trust (KMET)(Montagu, et al 2005). This scheme enhanced availability of funds to private franchisees through revolving loan programs using the instrumentality of microfinance. This allows community-based providers to expand services and improve the quality of the reproductive health services offered. This initiative has expanded to 125 franchisees since startup in 1995 and its scope has expanded to cover such as

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<sup>23</sup> In Rwanda, assisted childbirths rose from 39 percent in 2005 to 52 percent in 2008. Under-5 mortality fell by a third, from 152 deaths per 1,000 live births in 2005 to 103 in 2008 while the use of modern contraception rose from 10 percent to 27 percent in just three years. The World Bank (2010) linked this rapid progress to the adoption of results-based financing. This financing mechanism allows health facilities receive performance bonuses based on volume of services provided and performance achieved, for example, the number of children immunized. The funding mechanism creates incentives for improved quality of care.

<sup>24</sup> See Pro MHI (Micro Health Insurance) Africa – Newsletter, Volume 2, January 2009. The National Health Insurance Scheme in Ghana is being financed from a combination of members premiums, deductions from formal employees and earmarked percentage of the value added tax.

areas as post abortion care, home based care, K-MET community clinic, training & supervision, nutrition & food security, outpatient therapeutic programme and prevention of maternal death (see Box 2). The Population Services International's social marketing programme put in place by Top Reseau in Madagascar, 100% Jeune in Cameroon and Centre Dishishoze in Rwanda (using for-profit and non-profit clinics) used multimedia campaign and education as well as face-to-face communication and peer education programme to motivate 15-24 years old to practice safe behaviours including consistent condom use and abstinence. These programmes are reaching 600,000 youths in Cameroon, 73,000 in Madagascar and 150,000 in Rwanda. Other impacts include enhanced availability of services (e.g., use of condoms among young men in Cameroon rose from 29% in 2002 to 53% in 2003 while a corresponding percentage for female are 20 and 39% as the number of youth seeking STI treatment and other reproductive health services in Madagascar rose from 122 to 716 in 24 months) and affordability (Top Reseau charged a subsidized price of US\$1.45 for STI diagnosis) (Bhattacharyya, 2008).

#### **IV Potential for harnessing innovations for rapid progress on the MDGs**

The knowledge of how innovations take place and how policies and institutions facilitate enhanced innovations are central to unlocking the potential of reaching the MDGs in Africa. Evidence abounds that Africa is very rich in innovations, yet they remain at the micro level and have yet to generate the macro-level effects. For instance, the World Bank (2006) acknowledges some excellent examples of local innovations and discoveries in the agricultural sector including crop breeding, grafting against pests, water harvesting, soil management, conservation and processing. Indigenous agricultural innovations have continued to be important as most of the locally-grown food is for local consumption. While these series of innovations have produced some incremental values to their inventors, their applications are still confined to those that invented them and are yet to add to the frontier of knowledge. These innovations have not been linked to the national innovation system that could generate economy-wide effects at the national and regional levels. The question is, how can the benefits of these innovations be maximized?

First, harnessing knowledge for development is better achieved when there is space for policy experimentation and learning. This allows development to be expressed as local initiatives and champions complemented by international partnership. The role of IFAD in participatory learning in transforming land tenure system in the Gambia and the irrigation programme in Tanzania are good examples for experimentation.

Second, for innovations emanating from the public sector to impact positively and generate maximum results such innovations must be supported by extended interactions, collective action and broader public-private partnership programs. Innovations derived from interactions and dynamic processes increasingly rely on collective actions and multiple knowledge sources are always more reinforcing and have higher multiplier effects. Innovation collectively derived by multiple actors, namely, public, private and civil society often creates ownership, elicit support and commitment and more sustainable – the KMET project in Kenya and the tassa drought resistance programme in Niger and Burkina Faso provide illuminating examples.

**Box 2: Kisumu Medical and Educational Trust (KMET) serving as a catalyst on health MDGs progress in Kenya**

KMET is a non- governmental organization registered in the Republic of Kenya in 1995 whose activities cover post abortion care, home based care, K-MET community clinic, microfinance project, Youth 4 Youth Project, safe space project, training & supervision, nutrition & food security, outpatient therapeutic programme and Kenya prevention for maternal mortality. Since 40 percent of all physicians in Kenya work in private hospitals, the KMET is focusing on affordable and accessible reproductive health by leveraging the infrastructure and personnel of these existing providers by focusing on areas where government services are out of reach – KMET serves clients that are generally poorer than the community average. To deal with unsafe abortion which constituted 35% of maternal mortality and morbidity in Kenya, for instance, the post abortion care introduced in 1995 covers 300 service providers and has succeeded in strengthening provision of and access to safe and post abortion care as well as enhanced capacity of community based service providers. The home based care (HBC), introduced in 2001 due to problem of bed occupancy in hospitals, cares for 150-250 PLWHA and 800 family members while the KMET Community Clinic is providing quality preventive and curative services as well as referral to HBC patients. The sisterhood for change programme to address unmet reproductive health, started in 2006, is aimed at meeting the needs of disadvantaged adolescent girls aged between 10 - 24 years (especially, teenage mothers, orphans and school dropouts) in Kisumu district and it focused on the three slum areas of Kisumu (Manyatta, Nyalenda and Nyamasaria). The microfinance programme, a revolving loan scheme, was introduced in 2004 to support reproductive health, livelihood and OCVs. As at 2008, K-MET had disbursed loans totaling toKshs 21,858,000 to 31 private providers and 352 community based service providers (CBSPs).The Safe Space Project, introduced in April 2009, is targeting vulnerable teenage girls from the age of 14 to 22 years with the aim of empowering them through entrepreneurial skills training, reproductive health and food security. The nutrition and food security programme was introduced as part of the HBC to distribute nutrition supplements to PLWHA and OVC at home was initiated as an intervention strategy to avert the health and nutrition crisis in the district.

This initiative succeeded in creating a network of 204 private sector providers in areas out of reach of government services, serving the vulnerable groups in the society, its cost per couple year of protection was estimated at \$4.11 as at 2005 – among the lowest in Africa, improved quality of services through loans and exchange of information.

**Source:** Compiled by the author from <http://www.kmet.co.ke/projects/pages/nutrition.html>

Third, determinants of innovations are not viewed individually but within the complex sectoral innovation system. The main sector of interest will have to be linked with the innovation systems. Rapid progress on development issues have been attained where emphasis is on knowledge generation and adoption than mere strengthening of the research system and their outputs. This is specifically important for progress made in such countries as Ghana, Kenya, Uganda and Rwanda on agricultural innovation, productivity enhancement and poverty reduction (Larsen et al 2009).

Fourth, most policies and institutional innovation that have achieved rapid progress depend on simplicity and adaptation to suit the local context (the tassa drought initiative in Niger is a good candidate). In addition to significant adaptation, stronger coordination and collaboration is also required for the benefits of innovation to be maximized.

Fifth, countries where continuous adherence to standards is promoted by relevant public quality assurance and standards organizations create opportunities for innovations to take place. Besides, the context of specific public sector programmes and the prospect for higher profits often spur innovations from the private sectors. As such creating conducive environment for private sector to make normal profit allows for inventiveness and creativity that makes a difference in product and service deliveries.

Sixth, Africa's indigenous knowledge, due to lack of networks for sharing information and organized frameworks for distilling innovative ideas, has created continuous and non-additive innovation effect in the continent leading to a rise and collapse of innovations and a highly unstable production process especially in the agriculture sector. The isolation of innovation agents, barriers to flow of information and absence of a knowledge sharing network, made innovators to be indifferent to the public utility or the efficiency-impact of their innovations being widely diffused. Such ingenious ideas remain perpetually individualized or localized and sometimes disappeared at the demise of the innovator. As expressed by the World Bank (2006), *"... this occurs when an economy is caught in the indifference-trap with isolated agents innovating on the same knowledge system over and over again"*. Innovation agents do not learn from efforts of others and build upon such to advance the frontier of knowledge on the issue. An important way of harnessing this idea is to make indigenous or local innovations continuous and additive so that lessons can be learn from past experiences and value is added through information sharing. Due to lack of patent in local setting, to encourage innovation agents to share information to wider groups, people should be rewarded and acknowledged accordingly. It also requires the integration of indigenous knowledge into the innovation systems at the local and national levels.

Seventh, bridging the gap between applied research/knowledge institutions and practitioners across the various sectors is vital for harnessing knowledge. In spite of the tremendous efforts put in place on applied researches across agriculture, small enterprise development and service related activities, there still exist some gaps between research outputs and their applications by beneficiaries in Africa. This underscores the need to strength decentralized research structures with the aim of bringing these structures closer to their beneficiaries. For instance, the establishment of liaison mechanism to bridge the gap between research community and beneficiaries such as the Research-Extension Liaison Committee (RELCs) in Ghana and the

Regional Committees for Agricultural Research and Extension (CRRVA) in Mali (SWAC, 2005) has succeeded in establishing more cordial relationship between the two parties.

Eight, the MDGs have behavioural and cultural dimension which requires proactive social marketing and domesticating policy or practices to reflect local context. With innovations based on social marketing, products or services should be marketed to achieve behavioural changes. For instance on HIV/AIDS, Africa is endowed in rich humors in innovative ways to address taboo subjects such as contraception and HIV awareness as has been done to garner unprecedented positive public attention. Creating other innovative ideas such as "Condom Nights" and "Miss Anti-AIDS Beauty Pageants" in the red light areas in African towns and communities could produce remarkable results. Besides, it is important to tailor MDGs services to the poor by making its finances and operation reflect the attributes and characteristics of the poor to elicit patronage – meeting the needs of the poor. The establishment of waiting houses in Mozambique to meet the needs of the poor in terms of distance to nearby clinics and limited financial resources which allowed pregnant women to be admitted into the waiting houses few days prior to delivery date with free feeding, medication and treatment has provided substantial results. The promotion of informal education system in areas where formal education has proved very difficult in the Gambia and Nigeria has also produced better impact.

Nine, many innovative pilot projects have been adjudged successful in Africa but government have failed in many situations to expand the successful projects to benefit larger population. There is need to develop a framework for scaling up successful projects including such elements as a resource team that promotes the expansion of the innovative idea; organization that is expected to adopt the innovation; a strategy to transfer it; and the environment in which the transfer takes place. This should be an integral component of any pilot project and it is expected to mature based on the context.

## **V Conclusions**

Innovation is a critical element of the knowledge system that drives development process including the realization of the MDGs. Africa is rich in innovations across the various sectors and countries; progress in the various MDGs are being driven by policy and institutional innovations. However, they mostly remain at the micro level and at best partially shared among actors for continuous value addition. Most innovations have not been connected to the national innovation system for replication and scalability, and to generate maximum impact. The mechanisms for sharing knowledge and innovations are relatively weak to the extent that innovations in one part of a country are not known in the other part of the same country as well as within the region. Conscious effort should be put in place to bridge this gap.

Some key lessons abound across countries on institutional and policy innovations. Strong political commitment from the leadership of the various stakeholders especially the government is vital. The existence of stronger partnership and coordination is equally important. For every part of policy and institutional innovations, there is need for an effective coordination mechanism with clear roles and responsibilities for various actors.

To effectively harness knowledge and innovations for rapid progress on the MDGs, this paper proposes nine-point agenda, namely, (i) space for policy experimentation and learning; (ii) supportive extended interactions, collective action and broader public-private partnership programs; (iii) promote linkage between individual innovations and the national innovation system; (iv) innovations must be simple and context specific; (v) adherence to standards and quality assurance breeds innovations; (vi) developing mechanism for sharing innovative ideas while at the same time rewarding and acknowledging individual innovators; (vii) bridging the gap between research institutions and sectoral practitioners; (viii) using proactive social marketing and tailoring innovations to the needs and convenience of the poor; and (ix) as an integral part of the pilot, develop a framework for scaling up innovative projects within a given timeframe. These agenda are by no means exhaustive, but they are vital to harnessing knowledge and innovations for better development outcomes and the MDGs.

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