SDH-Net

Building Sustainable Research Capacities for Health and its Social Determinants

Report on Kenya Country Mapping of Research Capacity for Social Determinants of Health and Health Inequity

November 2012
## Members of the Kenyan Team working on SDH-Net Project

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<td>University of Nairobi Institute of Tropical and Infectious Diseases</td>
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Executive summary

Mapping Research for Social Determinants of Health and Health Inequity in Kenya:

This report provides results of a **mapping exercise** that was undertaken by Kenya team to establish the gaps in research capacity on SDH in Kenya. It sheds light on policies undertaken by Kenyan government on some SDH. The social determinants of health identified and considered to be relevant for reducing the health inequalities in Kenya include availability of water; poor waste management; changing and unhealthy food environments; deficient growth in housing supply; and inadequacy and organization of transport and health services.

A discussion of **SDH framework** used by Kenyan team has borrowed from structure and sectoral relationships identified by the National Health Policy Framework 2011-2030. The framework has conceptualized that SDH research could work through a model that identifies the nodes at which the research capacity would be naturally expected to be part of the structure and process. The framework demonstrates that the broad SDH is manifested in social economic performance indicators like poverty. These social economic performance indicators have their effect on health of the population through the health service indicators that are known to affect the health outcome. Consequently, there is the need to widen the interventions to improve health from beyond the boundaries of health ministries.

The components of the health **research systems**, can be put into four categories namely:-

- **First**, national research system for health which includes Bilateral and multilateral National Health Ministries, and Universities.

- **Second**, groups of the financiers of health related research and others undertaking research which has health components. These have been classified under central Government revenues, bilateral relationships like embassies and NGOs and, multilateral contribution.

- **Third**, category in Kenya research system that deals with health related issues is detected through key policy making or disseminating processes. In this sub-system key ministries are involved.

- **Fourth** group comprises representatives of civil society which include NGOs, INGOs and Media.
The most of research on SDH in Kenya has mainly been undertaken by the academic institution though bodies like CDC and KEMRI have also done a significant part. It is also notable that most of the health researches relating to SDH have been conducted in the field of economy and employment in Kenya.

In terms of coordination of research in Kenya, National councils of science and technology has the largest mandate. The Council has over the years concentrated support on many physical scientific research initiatives and development of research facilities especially in the country’s agriculture and health sectors.

To ascertain the research capacity in health using the SDH perspective, three related activities were undertaken by SDH-Net Kenya. They included:-

- Key informant interview
- Two stake holders meetings.
- Review of institutional research documentation

**Key informant interview:** A key outcome of the interviews was the observation that there was lack of training on SDH, lack of awareness and low understanding of SDH concept, limited capacity in areas like technical capacity, lack of support from other sectors, poor collaboration / coordination mechanism and lack of sensitization of community/parents on the relationship between SDH and health of the population. Hence it was agreed that for SDH to take strong roots in the health of the population it was necessary to create collaborations across sectors and both local and international bodies with interest in health, conduct training on SDH and create advocacy groups on SDH, support mechanism of sharing information about SDH, establish networks to build capacity on SDH and increase funding on SDH research.

**First stakeholder meeting:** WHO Commission on Social Determinants of Health, definition was emphasized and the following four reasons were cited key to addressing SDH:

- Social determinants have a direct impact of health
- Social determinants predict the greatest proportion of health status variance (health inequity)
- Social determinants of health structure health behaviors
- Social determinants of health interact with each other to produce health

Correlation of SDH to health indicators showed that health mortalities and equity issues were closely related for there were evidences pointing to a significant gap between the poorest and richest wealth groups with the poor having higher under five mortality then the rich. Also a comparison of the infant mortality rates of sub-Saharan region with the rest of the world from 1960-1981 and from 1981-1999 showed that there was a general
decline in infant mortality but despite the decline there was a widening gap on the rate of decline. Another key report was on health inequities where it was demonstrated that life expectancy of indigenous male populations in Australia, Canada and New Zealand kept varying over different time duration. Again the probability of living to 65 years was observed to have decreased over time for the populations that were only able to receive elementary education while that of those who received university education were observed to have increased over time thus widening the mortality gap between the two groups.

Some key Recommendations during the first stakeholder meeting included the following:-

- Efforts should be put to enhance community involvement at all levels of planning and implementation for ownership of activities that will help improve health outcomes.

- A key solution that involves health promotion strategy need to established e.g., there is need to address the mindset of road users in Kenya to mitigate the morbidity and mortality cases on our highways.

- The health sector needs to change its focus from investing more in curative services to increase their investments on preventive and promotive services.

- There is need to identify documents that we can work with to strengthen inter-sectoral approach in the management of the social determinants of health e.g. the national annual plans and vision 2030.

- There is need for policy direction on the utilization and prioritization of resources directed to the health sector.

- There is need for advocacy and capacity building in the policy, planning and budgeting for the purposes of mainstreaming the social determinants of health in all the sectors.

- There is need to explore the best mechanisms for inter-sectoral collaboration based on the existing evidence in the country on the country’s health indicators in relation to various sectors performance factors.

*Second stake holders meeting*: Had the key objective of determining the needs for building research capacities for health and its social determinants in the country.

The key recommendations derived from this workshop included:-

- There is need of addressing legal autonomy especially on health issues affecting women impacts on their access to health care as they depend on other people/the community to make choices for them including health related ones.
• The research agenda in health needs to look at the actors, needs, capacities, gaps and sustainability issues.

• There need to assess what has been done under the Ministries in relation to social determinants of health.

• The health sector in collaboration with other sectors needs to use research to enable in the development of indicators that can be used to measure progress in SDH in the country.

• SDH needs to be mainstreamed into the health workforce by integrating it into the health curriculums of tertiary learning institutions involved in training health officers.

• There is need to focus outside health outcomes when looking at SDH, thus the need to introduce developmental outcomes.

• There need to prepare a framework for the implementation of the Capacity Building programme in research capacity for SDH.

• The School of Public Health should coordinate the research arm of the national SDH business plan and carry out carry out the implementation.

• Synergy of the SDH activities occurring in the Ministries on Health, University of Nairobi and World Health Organization- Kenya should be carried out.

**Way forward:**

From the mapping exercise it is clear that fielding of SDH approach in Kenya is faced with serious limitations of which the key is low uptake and inter-sectoral applications. The mapping exercise has clearly demonstrated that there is lack of documentation regarding SDH influence on population health in Kenya. The way forward is to develop a scheme of research capacity building that will facilitate generation of such information which will in turn inform policy on the effects of SDH on the population health.
Report on Mapping of Research Capacity on Social Determinants of Health in Kenya.

Introduction

Convincing evidence has been mounted that the health sector alone can never manage the ever growing burden of disease and ill-health no matter how efficient or advanced the health system is. This follows from the fact that the health sector has no control on most factors that determine or influence health. It is evident that major issues such as Climate Change, Water and Food Security, economy and employment, education, infrastructure continue to exert enormous influence on population health though they all lie outside the health sector. It is in this context that European Union SDH project has taken a lead at developing a way forward to scrutinizing appropriate evidence that demonstrate how other sectors of the economy affect health of the population. The project intends to build research capacity on Social Determinates of Health in the selected MIC and LIC. Kenya is among the eleven member countries involved in this endeavor.

This is a report on the mapping exercise that was undertaken by Kenya team to establish the gaps in research capacity on SDH in Kenya. The report starts by shedding some light on some policies adopted by Kenyan government on SDH. The report also give a summary of framework developed by the Kenyan team on SDH with some insight on its application before describing the research system that deal with health issues in Kenya. Discussion of actual mapping on SDH is reported in terms of deliberations that came out of various stakeholder meetings, interviews and reviews.

Social Determinant of Health Policies in Kenya

In Kenya social determinants of health have been addressed through identification of public policies have direct or indirect implications on health. This has been done through the formulation of the understanding of health policies in almost all sectors. The programmes of key sectors of the Economy have health influencing activities in their policies, the term Social determinant of health is still a new concept in application.
The main policy goal has been provision of affordable and quality healthcare to all citizens through ensuring that all sectors deliver on their role in provision health.

The discussion of Kenya SDH has been amplified through the National Health Policy Framework 2011-2030, (GoK, 2012) which has defined the key health related sectors in which SDH strategies are adoptable. The policy framework identifies the sectors as, economy and employment which is aimed at ensuring work and stable employment opportunities for all people across different socio economic groups; security and justice which deals with fair justice systems, particularly in managing access to food, water, housing, work opportunities, and other determinants of wellbeing; Education and early life with emphasis on support of education attainment of both women and men to promote abilities to address challenges relating to health; agriculture and food with considerations of health in food production, manufacturing, marketing and distribution; nutrition with objective of ensuring adequate nutrition for the whole population, through avoiding and managing over, or under nutrition; infrastructure, planning and transport which give guidelines on optimal planning of health impacts for roads, transport and housing investments, to facilitate efficient movements of people, goods and services relating to health; environments and its sustainability look at the influence of population consumption patterns of natural resources in a manner that minimizes their impact on health; housing with aim of promoting housing designs and infrastructure planning that take into account health and wellbeing; land and culture with the purpose of strengthening access to land, and other culturally important resources by particularly women, and finally population which is targeting to manage population growth and address migrations and its health impact.

The social determinants of health identified and considered to be relevant for reducing the health inequalities in Kenya which manifest in insufficient availability of water; poor waste management; changing and unhealthy food environments; deficient growth in housing supply; and the inadequate organization of transport and health care services (Mwabu, 2011; Muchukuri and Grenier, 2009). Health in all policies (HiaP) singles out six broad categories of social determinants that are stand out in the Kenyan scene.
These categorization includes general socioeconomic, cultural and environmental conditions, living and working conditions, social and community influences, individual lifestyles age, sex, and hereditary factors, health and medical services (Mwabu, 2011; Kickbusch, 2008).

The current road map to Kenya development has been pitched on an ambitious development plan, Vision 2030. The vision has recognized health sector as one of the key element of social pillar with the objective of improving the overall livelihoods of Kenyans through provision of an efficient, integrated, high quality and affordable health care system. Priority will be given to preventive care at community level, through a decentralized national health–care system (GOK 2011c). Vision 2030 has given key focus in health sector in the following areas:

- **Access** - geographical access, financial access, social cultural barriers
- **Equity** - regional disparities, social-economic factors gender and vulnerable groups, physically challenged
- **Quality** - service delivery, research, efficiency
- **Capacity** - service delivery systems, health care inputs partnerships and health care financing
- **Institutional framework** - healthcare policy level and type of autonomy/integration, incentive structure, stakeholders involvement/collaboration

With realization all over the world that people with generally poor health status have low education levels and that illiteracy is associated with poverty, malnutrition and ill health, and in particular, higher rates of infant and child mortality, the Kenyan government has put a resolve on education achievement. Apart from policy geared towards education achievements, comprehensive school health program (CSHP) has been incorporated. CSHP enable the government to address the health and education
needs of the learners, teachers, and their families. This programme is aimed at providing for quality health education and health services to promote the overall health hygiene and nutrition of children. The program also targets at providing the mental and psychological health of children by providing a positive and safe physical and psychological environment (GOK, 2009a; GOK, 2009b).

Food security has been another major health concern in Kenya. Kenya is among the 22 countries globally characterized by food insecurity as identified by the UN Food and Agricultural Organisation (FAO, 2010). To mitigate this, Food Security and Nutrition Policy framework (GOK 2010) has been developed. This overarching framework covers the multiple dimensions of food security and nutrition improvement. It has been purposefully developed to add value and create synergy to existing sectoral and other initiatives of government and partners. It recognizes the need for partnership between public and private sector and that hunger reduction and nutrition improvement is a shared responsibility of all Kenyans. The policy adopts the life-cycle approach to improved nutrition that emphasizes the biological needs in terms of different specific amounts, types and varieties of nutrients for population groups who are at specific stages of life.

Another sector that has been of major concern to the health of the Kenyan population has been Transport and infrastructure. Kenya loses nearly 3000 people a year from road traffic accidents. Nearly ten times that number of people is again injured annually on the roads. The key factors leading to this have been identified as human error such as over speeding, dangerous overtaking, drunken driving and poor use of the road. A policy document on National Road Safety Action Plan 2005-2010 is currently under revision. This action plan intends to enhance road safety co-ordination and management towards reducing death, suffering and economic losses due to road crashes. Effective involvement of public, private and civil society organizations is key element of the plan. The dream of the plan is to reduce road carnage by 50% within a span of 5 years of the plan.
Housing as another critical determinant of health has been addressed with the broad objective of facilitate the provision of adequate shelter and a healthy living environment at an affordable cost to all socio-economic groups in Kenya in order to foster sustainable human settlements. This broad objective is spelt in Sessional Paper No.3 on National Housing Policy for Kenya (2004). The specific objective of the Housing Policy is to minimize the number of citizens living in shelters that are below the policy stipulated habitable living conditions. It also aims at curtailing the mushrooming of slums and informal settlements especially in the major towns. The ministry of housing has come up with a slum upgrading program that looks into improving the housing conditions of those living in slum areas. Other related specific objectives of this housing policy includes promotion green and energy efficient buildings and materials, provision of housing incentives that are geared towards making housing affordable to the low income earners and attract investors and developers, and creation of awareness on dangers inherent in occupation of unsafe and unhealthy houses.

The provision of both adequate and quality water has been singled out as a critical element that enhances population health in Kenya. It is critical in the sense that its consumption and utilization affects hygiene, sanitation processes and environmental good which have a direct impact on health of the population. The water management policy (1999) has lead to the development of the National Water Resources Management Strategy has that has an overall goal of eradicating poverty through the provision of potable water for human consumption and water for productive use. The fundamental objectives for managing Kenya’s water resources are to achieve equitable access to water resources and their sustainable and efficient use. It also aims at preserving, conserving and protecting the available water resources and allocate them in a sustainable, rational and economical way (GOK, 2007b). Water supply and sewerage development strategy has the mandate of supplying water of good quality and in sufficient quantities to meet the various water needs while ensuring safe disposal of wastewater and environmental protection (GoK, 1999a). With the realization that high prices of water have discriminative tendencies in use, the government is adopting a
water pricing policy that is based on the user pays principle. Implying the more one uses the higher the cost (GOK 2007b).

**Knowledge Production**

**Framework for SDH health impact determination process**

The framework borrows from structure and sectoral relationships identified by the National Health Policy Framework 2011-2030, (GoK 2012). To begin to conceptualize how to search and identify SDH research we work through a model that identifies the nodes at which the research capacity would be naturally expected to be part of the structure and process. The relationship between social determinant and health is first discussed in order to have a clear understanding of the knowledge sought from the research perspective. The framework is the starting point of understanding the link between Social determinant and the transmission mechanism followed in order to affect health outcome. With this framework, sectors have a way of interrogating the role they play in having some health impact.

Table 1 shows that population health is influenced by a wide range of factors, including economy and employment, security and justice, education and early life, agriculture and food, nutrition, infrastructure planning and transport, Environment & sustainability, Housing and population. The table demonstrates that the broad SDH are manifested in social economic performance indicators like poverty. These social economic performance indicators have their effect on health of the population through the health service indicators that are known to affect the health outcome. Consequently, there is the need to widen the interventions to improve health from beyond the boundaries of health ministries.
Table 1: Conceptual framework for SDH health impact determination process

<table>
<thead>
<tr>
<th>BROAD SDHs</th>
<th>SOCIAL ECONOMIC PERFORMANCE INDICATORS OF SDH</th>
<th>HEALTH SERVICE INDICATORS</th>
<th>HEALTH IMPACT INDICATORS</th>
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<tr>
<td>• Economy &amp; Employment</td>
<td>• Poverty</td>
<td>• Availability and distribution of health facility</td>
<td>• Neonatal mortality rate (NMR)</td>
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<td>• Security and justice</td>
<td>• Employment ratio</td>
<td>• Number of skilled health workers present</td>
<td>• Infant mortality rate (IMR)</td>
</tr>
<tr>
<td>• Education &amp; early life</td>
<td>• Remuneration differentials</td>
<td>• Affordability and availability of nutritious foods</td>
<td>• Under 5 mortality rate (UMMR)</td>
</tr>
<tr>
<td>• Agriculture &amp; food</td>
<td>• Unemployment rates</td>
<td>• Affordability and availability of health care inputs (ARV, Immunization, TB and Malaria treatment, health technologies)</td>
<td>• Maternal mortality ratio (MMR)</td>
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<tr>
<td>• Nutrition</td>
<td>• Stress</td>
<td>• Availability of time to practice exclusive breast feeding</td>
<td>• Adult mortality rate (AMR)</td>
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<td>• Infrastructure planning &amp; transport</td>
<td>• Gender</td>
<td></td>
<td>• Fertility rate</td>
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<td>• Environment &amp; sustainability</td>
<td>• National budget</td>
<td></td>
<td>• Contraceptive prevalence rate</td>
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<tr>
<td>• Land &amp; culture</td>
<td>• Violence</td>
<td></td>
<td>• Disease based (TB, HIV, Malaria et)</td>
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<tr>
<td>• Population</td>
<td>• Security and justice</td>
<td></td>
<td>• Life expectancy</td>
</tr>
<tr>
<td></td>
<td>• Violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Education &amp; early life</td>
<td></td>
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<td></td>
<td>• Agriculture &amp; food</td>
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<td>• Nutrition</td>
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<td></td>
<td>• Infrastructure planning &amp; transport</td>
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<td>• Environment &amp; sustainability</td>
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<td>• Housing</td>
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<tr>
<td></td>
<td>• Land &amp; culture</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Population</td>
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The framework can be matched with Kickbusch, 2008 framework where SDH are shown to contribute to the health of the people in a given population who eventually contribute to economic development via healthy economy captured through a transmission mechanism of increased labor productivity. Kickbusch framework answers the question which has always been at the centre of other sectors outside health, that is, why should other sectors be interested in the health of population or simply asked why “Health in all Policies” and not for example “Environment in all Policies?” Kickbusch show the link between health and economy in that better health is associated with increases in the labor supply, labor productivity, and investments which affect all sectors of the economy or SDH attributes.

Table 2 shows that social determinant of health affects the health of the population through the linkages described in table 1. The health of population consequently affects labor productivity that increases the sectors output that have positive impact on social determinants like education, food intake, housing etc.

**Figure 1: Causal link between social determinants and Health**

![Diagram showing the causal link between social determinants and health.](image)

Adapted from Kickbusch, (2008)

**Some Key findings in Kenya to Support the framework**

Using the framework provided in table 1 some insight in Kenya data support the hypothesis of the health outcome framework. The next section give a highlight of some
observed trend between health outcomes and some identified social determinants in Kenya.

There have been studies done in Kenya that emphasize the importance of economy as a social determinant of health. If economy is not performing well unemployment is a key result that characterizes poverty which in the proposed framework have an impact on health. This hypothesis is supported by Mariera, et al. (2006) work which reported some key correlations between employment and HIV/AIDS health conditions. This study was conducted under a standalone consultancy initiative. There were two key finding relating to Health and employment. Firstly, people working in lower occupational categories were more likely to be affected by HIV scourge than those in more prestigious occupations and individuals from households headed by self-employed persons were more likely to be affected than those from all other occupational categories. Secondly, productivity and labor supply declined as a result of prolonged illness (morbidity and mortality) leading to a fall in the per capita output. This study demonstrates the cyclical tendencies observed in Kickbush (2008) and Mwabu (2011) hypothesis where economic structure as social determinant affect health of the population and health of the population in turn affecting the economic structure through a decline in output.

GOK, (2007) on Household health expenditure established a strong correlation between wealth index and use of inpatient care. It observed that individuals in the richest wealth index are about twice as much as likely to use inpatient care as those in the poorest quintile.

Just like GOK 2007, WHO 2010, has given some insight on some apparent relationship between welfare measure and some health care access and health outcome in Kenya. The reports demonstrate that members of higher wealth quintile are highly correlated with a higher health care access compared with those at lower wealth quintile. For example, a) women in the poorest quintile are 6.2 times more likely to be underweight compared to those in the richest quintile, b) the proportion of stunting in children in the poorest households is 137% higher than those in the richest households, c) women
in the poorest quintile are four times more likely to express unmet need for contraception compared to those in the richest quintile, d) the use of bed nets by pregnant women is eight times more frequent in the richest households than in the poorest ones and, e) the poorest quintile experience a 44% higher infant mortality and 77% higher under five mortality than households in the richest quintile.

Further analysis on maternal health indicator on poverty level in Kenya has been demonstrated by Africa Health (2010) as shown in table 2. This table shows the trend of maternal health indicator as compared with welfare index as proxied by wealth quintiles. From the table it seems clear that the maternal health indicator improves with a climb in quintiles.

Table 2: Maternal health indicator and Welfare Measure in Kenya, 2010

<table>
<thead>
<tr>
<th>Maternal health indicator</th>
<th>Wealth quintile</th>
<th>Lowest</th>
<th>second</th>
<th>middle</th>
<th>Fourth</th>
<th>Highest</th>
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<td>Total fertility rate</td>
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<td>7.0</td>
<td>5.6</td>
<td>5.0</td>
<td>3.7</td>
<td>2.9</td>
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<td>Contraceptive prevalence rate(%)</td>
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<td>40</td>
<td>50</td>
<td>57</td>
<td>55</td>
<td>46</td>
</tr>
<tr>
<td>Delivery in health facility (%)</td>
<td></td>
<td>18</td>
<td>30</td>
<td>42</td>
<td>52</td>
<td>81</td>
<td>43</td>
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<tr>
<td>Delivery attended by doctors or nurse midwife(%)</td>
<td></td>
<td>21</td>
<td>31</td>
<td>42</td>
<td>53</td>
<td>81</td>
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<td>Received postnatal checks (%)</td>
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<td>Prenatal rate mortality rate/1000 live birth</td>
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<td>34</td>
<td>36</td>
<td>27</td>
<td>41</td>
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</table>

Source: Africahealth, 2010

There are also inequities in mortality associated with education level of the mother, although a clear gradient does not exist. According to WHO (2010) the prevalence of infant mortality for children born to mothers with no formal education in Kenya was 8% higher than that for children born to mothers with at least some secondary education. The report found children born to mothers with no formal education to have a mortality
rate which is more than 22% higher than children born to mothers with some secondary education. In both cases, however, the highest mortality rate is among children born to mothers with some primary education. Similarly, rural area residents experience 31% more infant mortality and 28% more under-five mortality than urban dwellers.

Mariara et al. (2006) found that less educated people were likely to lose more days of work due to hospitalization than the more educated in Kenya. Again the incidence of morbidity was higher among female headed households with less education than male headed households with similar level of education meaning education of women matters.

The level of a woman’s education, a poverty related variable is also a proximate determinant of the poor maternal health outcomes in Kenya. Taking the example of skilled attendance at childbirth, the 2008-9 KDHS showed that the percentage of deliveries that were attended by a skilled attendant (doctor or nurse/midwife) was lowest among mothers with no education at all (19%), it was slightly above the national average of 44% for women who had completed primary education (49%), and highest among those with secondary education and above (73%).

**Research Systems in Kenya that deals with Health Issues**

The research systems that have health components in Kenya can be put into four categories. Category **one** includes national research system for health encompassing Bilateral and multilateral, NGOs (local and internationals, National Health Ministries, and Universities. Specifically these representatives includes, Kenya Medical Research Institute (KEMRI), University of Nairobi under college of Health Sciences, UNITID, College of Humanities and School of Economics; Moi University’s College of Health Sciences; Kenya Institute of Public Policy Research and Analysis; African Economics Research consortium, Kenya National Bureau of Statistics and Ministries of Health.

The **second** category groups the financiers of health related research and others undertaking research which have health components. Independent research work as mentioned above is thus generated. These has been classified under central
Government revenues, bilateral relationships like embassies and NGOs, multilateral contribution which includes world Bank, and IMF; United Nation Bodies; Regional Economic and development bodies like ADB and EU; Foundations like Bill Gate.

The third category in Kenya research system that deals with health related issues is spelt through key policy making or disseminating process. In this sub-system key ministries are involved. Example of ministries and organisations that deals with health policy issues includes Ministries of health, Ministry of finance, Ministry of planning and Kenya Institute of Public Policy Research and Analysis (KIPRA).

The fourth category of the sub-system is derived from the representative of civil society which includes NGOs, INGOs and Media. The specific representatives in this category include but not limited to African Medical and Research Foundation (AMREF), Kenya Red Cross, Local print and electronic media with national coverage (KBC, Nation Group and Standard Group, Royal Media Group).

A more detailed list of institutions/organisations that have a health component in their strategic plans is provided as an appendix.

The key characteristics of these representatives are that they work and pursue their health agenda as single entity with no effort for consolidation for convergence to address the goal of health improvement. No wonder it is in this line that the Ministry of Public Health and Sanitation has been exploring ways of strengthening inter-sectoral collaboration to attain its national goals. The new national health policy framework (2012-2030) clearly spells out the policy directions needed to implement this initiative. It was in this regard that the Ministry of Public Health and Sanitation organized a two days meeting in May 2012 with other government sectors to introduce the SDH concept and to explore possible opportunities for addressing existing health determinants and inequities.

**Trend of social determinant of health research done in Kenya**
A search of research done in health and that relates to identified social determinant of health in Kenya was done using an internet search. The search returned a total of 78 researches and project work on health that has a bearing in SDH in Kenya. The finding has been reported in the following two tables. The first table has reported the organizations involved in these researches and the number of researches attributable to each organization. The second table presents the sectors or what is in this case termed as the relevant social determinants avenue through which population health is affected. These are generally the sectors which contribute to towards the social determinants of health as spelt also in the mapping report.

Table 3: Number of health research relating to SDH conducted by different organization in Kenya

<table>
<thead>
<tr>
<th>Research organizations</th>
<th>Number of research on SDH related</th>
<th>Approximate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>APHRC</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>AERC</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>KIPPRA</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>KEMRI</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Universities</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>WHO</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>CDC</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors Internet search 2012

The search points towards a trend in which most of the SDH related research has been conducted by academic institution and other research organizations that has a strong bearing in health research like CDC and KEMRI. This suggests that though a lot of
research has been done in health, few have been reported as having concentration on SDH in Kenya.

Table 4 Number of Health research done by sector relating to SDH in Kenya

<table>
<thead>
<tr>
<th>Social Determinant Sector</th>
<th>Number of research reported</th>
<th>Approximate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy and Employment</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Environment and Sustainability</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Culture</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Education and lifestyle</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Infrastructure, planning and transport</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Population</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Social justice</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Agriculture, Food and Nutrition</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Authors internet search 2012.

From table 4, most of the health research relating to SDH have been conducted in the field of economy and employment in Kenya. It is also notable that substantial work has also been done in the areas of agriculture, food and nutrition, environmental and sustainability, and education and lifestyle. Culture as it relates to health has also attracted quite a significant percentage. What has come out of this search is that, a lot more need to be done not only in the area identified but also in other areas of social determinants not reflected by this general search.
Research systems performances

National councils of science and technology

The national oversight on research, science and technological innovation is expected to be mandated to a national institution. Science and technology provide the essential means for facilitating economic, social and cultural transformations at national and global levels. Success of national development policies will often largely depend on the extent of integration of modern science and technology in their implementation. In recognition of the importance of science and technology to national development processes the government of Kenya established National Council of Science and technology. The Council has over the years concentrated support on many scientific research initiatives and development research facilities especially in the country’s agriculture and health sectors. However a review of the listed functions and activities of the council reveal a clear absence of dedicated functions or achievement in the area of SDH. This again is in conformity with the observation that except in the recent past, SDH have not been processed in research management and designs as an integrated category of national development issues that merit standalone policies and focussed research governance interventions.

Research Capacity on Social Determinants of Health in Kenya

To ascertain the research capacity in Health using the SDH knowledge, three related activities were undertaken by SDH-Net Kenya. The first one was a face to face interview with Key informant in various organizations that has stake in health research. This included senior government officers in ministries, senior researchers in academic
institutions and international organizations. The objective was to have a firsthand grasp of how various sectors deal with health directly or indirectly perceive their role in terms of policies touching on Health. The second objective was to establish the level of engagement required in developing research capacity on social determinants of health emanating from all sectors. The fact that social determinant of health building blocks are derived from need to include health policies in all the sectors of the economy, deliberate sensitization on SDH role across various sectors was found to be a critical omission.

The two other activities were stakeholders meetings. The first stake holder meeting was held under the auspices of WHO and the Ministry of Public Health and Sanitation (MOPHS). There is a good collaboration between MOPHS and the School of Public Health, university of Nairobi which meant that SDH-Net Kenya members were invited to participate in this workshop.

The second stakeholder meeting was organized by SDH-Net Kenya in collaboration with MOPHS. The objective was to continue filling the knowledge gaps on production section in terms of what is currently under health research in agreement with SDH and also to ascertain gaps and recommendation on the research capacity on SDH. Another key objective of this stakeholders meeting was to sensitize stakeholders on the collaborative effort that the SDH-net is making to build capacity on SDH research in a sustainable manner. The following section provides some outcomes of the stake holders meeting in relation to research on SDH.

**Analysis of Key informant interviews on SDH in Kenya.**

Key informant interviews were conducted to establish the knowledge of and challenges in the understanding and implementing of policies which target in social determinant of health. Fourteen key informants participated in this exercise. They were drawn from various ministries, international organizations dealing with health related issues, and academic institution with a strong emphasis on health research. The choice of these
informants was guided by the mapping done on organizations that have done work/research with an inclination on SDH related.

One key aspect inquired was why the expert thought it was important to address the SDH. The message that came out was that majority of the expert believed that SDH was crucial because all the sectors are involved in one way or another in the health of the population. There were those who believed that maintenance of population health is directly related to the SDH while others saw SDH as enhancing human capital development.

Responsibility of SDH and prioritization was reported by majority of the expert as one for all sectors. There was some expert who felt that SDH relates to health and as such it should be under the umbrella of the ministries of health. Some expert also argued that SDH should be in all policies or sectors but to be coordinated from the ministries of health. Inclusions of other player in the SDH in form of Bodies dealing with Health related issue was found to be important in addressing the responsibility of dealing with SDH.

Programs to address SDH were mainly identified as under advocacy, community involvement and advisory services, research, policy related activities, HIV related education programs, community-multisectoral programs and peer to peer education programs. It was also found that a number of experts had no clear programs on SDH and the key reasons given were that, management was not well informed of the role of the SDH, there was lack of leadership in the adoption of SDH programs, they did not find SDH as directly related to their day to day activities. When the question on program was probed further, several programs relating to SDH were cited as, anti-smoking campaign, cleaning environment, HIV campaigns, school health programs, health promotion schemes, road safety measures, and nutrition programs.
Measures of SDH were thought as key aspect towards the evaluation of the effect and trends of SDH adoption over time. Expert alluded to various measureable aspects of health outcomes and some aspect of social determinant measures. Research finding on issues relating to SDH is used in which case many categories of outcome are reported. For example measure of Stunting children, birth weights, standardized health measures related to diseases, mortality and service provision, and TB infections rate are some measure identified as showing health outcome from some SDH interventions. Poverty incidences, rates of road accidents, job categories and number of health care workers were reported to give some measures of SDH related aspect that affects the health outcome.

Useful strategies in SDH that were felt by the key informant to have a likely impact in integrating SDH in the mainstream work that could address health of the population included inter-sectoral consultations, collaboration and participation, setting funding and other resources for SDH research including community empowerment in terms of financial and technical assistance in dealing with health related programs or programs that have health impact, conducting more research and training on SDH and creating networks with partners dealing with health of the population like WHO.

Financing of SDH related research was reported to receive low attention. Most of the key respondent did not indicate that their organizations have kept a budget to finance SDH lines. Some argued that their organizations did not appreciate the role of SDH in the health of the population. Some even thought that they have no mandate to finance SDH for their role is specific in terms of where their money should go. For those who reported effort to finance SDH related work, they reported it as doing it in the field of research, implementation of inter-sectoral policy plan and policy development, HIV/AIDS related activities and accidents at work. The experts were not able to estimate how much goes into such financing.

Additionally, it was reported that most of the organizations do not receive support in the direction of working on SDH. For those who received such assistance it was mainly
in the field of financial support to conduct research and training. But expert alluded that the support is quite limited due the fact that the inter-sectoral approach to tackling health issues is still taken with a lot of reservations.

Most of the experts were clear with the policies touching on SDH. Though some of them do not have them in their organizations, they claimed to have learnt of them through inter-sectoral forums. For those who reported existence of policies in their places of work, cited some of the following key policy documents; Kenya Health Policy Framework, WHO Global Strategic Plan, strategic plan, school health policy and guidelines, HIV policy and gender policy, school safety standards policy, occupational Safety and Health at Work and clean Environment policies and Healthy learning teachers guide School safety standards policy

It was felt that addressing SDH in Kenya was still an uphill task given that it is still confronted with a lot of challenges. The key challenges which were more less unanimous with most of the experts were reported as; lack of training on SDH, lack of awareness, low understanding of SDH concept, limited capacity in areas like technical capacity, lack of support from other sectors, poor collaboration/coordination mechanism and lack of sensitization of community/parents on the relationship between SDH and health of the population. To this extent there was consensus by most of the key informant that priority should be given to collaborations across sectors and both local and international bodies with interest in health, training on SDH and creation of advocacy groups on SDH, supporting mechanism in sharing information about SDH, establishing networks to build capacity on SDH and increasing funding on SDH activities and research.

**Deliberations of the First Stakeholders Meeting**

The first workshop was held on 15-16 may 2012. The theme of the workshop was the Social Determinants of Health. The general objective of the workshop was to examine the role of different sectors in addressing social determinants of health in Kenya while the specific objectives were into three folds and included one, exchanging experiences
across sectors on reducing the health equity gap through action on social determinants of health/SDH two, linking salient issues of the overarching Commission on Social determinants of health recommendations to national strategies and policies for reducing the health equity gap through addressing social determinants of health and three delineating required actions for the Ministry of Health and other sectors to reduce health inequities through addressing social determinants of health.

The participants represented the health, education, research, housing, labour, environment, agriculture, water, national heritage & culture, roads, immigration, justice and planning national development & Vision 2030. This mix of experts created an opportunity for participants to discuss the SDH issues and the role their institutions have been playing in influencing the social determinants of health. Most of the participants were from the national government institutions. These participants comprised of senior government officials, senior lectures, scientists and experts from the private sector. About 25% of the participants were from the private sector.

The meeting started by giving a brief background of social determinant of health where WHO Commission on Social Determinants of Health, (2008) definition was emphasized. It was highlighted that the reason why there is such an emphasis on the social determinants of health was because:

- Social determinants have a direct impact of health
- Social determinants predict the greatest proportion of health status variance (health inequity)
- Social determinants of health structure health behaviours
- Social determinants of health interact with each other to produce health

The participants were then introduced to the commission’s recommendations which were looked at under the main headings of:

- Improving daily living conditions
- Tackling the Inequitable Distribution of Power, Money and Resources
- Measuring and Understanding the Problem and Assessing the Impact of Action
A presentation on some work done on correlations between health mortalities and equity issues was highlighted. The research finding presented indicated that life expectancy of men at birth was better for developed countries than the developing ones. Countries with higher purchasing power were shown to have better health indicators on their under-five mortalities.

To underscore and illustrate the importance of SDH to the attendees from diverse sectors a comparing the under-five mortality to wealth groups in five countries that ranged from developed to least developed countries, it was noted that there was a significant gap between the poorest and richest wealth groups with the poor having higher under five mortality then the rich. The indicator of the wealthiest group’s under five mortality in the least developed country was still worse than the under five’s mortality indicators on the poorest groups in some of the developed and developing countries.

Again a comparison of the infant mortality rates of sub-Saharan region with the rest of the world from 1960-1981 and from 1981-1999 showed that there was a general decline in infant mortality but despite the decline there was a widening gap on the rate of decline.

While comparing mortality on persons between 40-80 years with occupational hierarchy (administration, Professor/ Executive, Clerical and others) for over 25 years, it was reported that in general the younger working group aged between 40 and 64 years had a lower mortality as compared to the working group aged 70-89 years. The three age groups that were being compared showed those who worked as administrators or in executive position had lower mortality ratios while those who worked in other jobs other than clerical had the highest mortality rates.

Health inequities were also demonstrated through the life expectancy of indigenous male populations in Australia, Canada and New Zealand over different time duration. The indigenous male populations had a lower life expectancy as compared to the rest on the national male population in all three countries. The year’s gap between the indigenous males and the rest of the population ranged from 7.3-17.2 years.
Brazil provided a case of health inequities of infant mortality by race and mothers level of education using 1990 data. The presenter indicated that the white women with more than 8 years of education had the lowest infant mortality while the none educated black women experienced the highest infant mortality.

The role of education to health outcomes was highlighted by the use of a study done in Russia by Murphy et al (2005). The study demonstrated that there was a widening gap in the adult mortality rate over a period of 13 years (1989-2001) of population that only received elementary education and those that received university education. The probability of living to 65 years was observed to have decreased over time for the populations that were only able to receive elementary education while that of those who received university education was observed to have increased over time thus widening the mortality gap between the two groups.

After presentations by conveners of the workshop the sectors presented activities that have contributed directly or indirectly to the health of the Kenyan population. It was unanimously agreed that in Kenya, many of the health disparities across social groups and regions are unfair, because many can be averted. However, the health ministries alone cannot avert or eliminate these disparities. Similarly, improving the health status for the whole population is beyond the reach of the health ministries alone. Thus, health as a form of well-being and therefore a focal point for development can only be realized through joint efforts of all sectors of society. That the sectors are not reliably able to measure the disparities was underscored by the discussions.

Each sector was asked to give recommendations of involving health in their policies and to suggest key hindrances to such undertaking. The following section highlights some of the key recommendations floated by various sectors. These recommendations are perceived to map out the ground for research in social determinants of health.

**Recommendation on Research Capacity on Social determinants emanating from the National stake holders workshop on SDH in Kenya**
• Efforts should be put to enhance community involvement at all levels of planning and implementation for ownership of activities that will help improve health outcomes. An example of the success story of community involvement in Rwanda in environmental conservation was given.
• The role of culture and religion in our country is very important and it should be taken into consideration when looking into the modes of achieving better health.
• The new trend that have been observed in Kenya i.e. lifestyles, the effects of globalization (access to fast food and junk), advertisement are contributing to the high rate of Non-communicable diseases in Kenya. A key solution that involves health promotion strategy need to established
• There is need to address the mindset of road users in Kenya to mitigate the morbidity and mortality cases on our highways. Kenyan licensed drivers also need to be tested on their driving skills on a regular basis as a measure of reducing the number of illegal drivers and incidences of accidents due to the increased number of drivers who break driving rules on a daily basis.
• The health sector needs to change its focus from investing more in curative services to increase their investments on preventive and promotive services.
• There is need for a paradigm shift in the medical training institutions in the country. They need to increase more content on preventive and promotive health care.
• There is need to identify documents that we can work with to strengthen inter-sectoral approach in the management of the social determinants of health e.g. the national annual plans and vision 2030.
• The cases of rickets in our young children have re-emerged due to the high rise buildings and the lack of play grounds in residential areas in Nairobi thus children have very little contact with the sun which they need for their skeletal development. This is a key area that needs urgent attention.
• Participants were informed of the trans-fat regulations being in the final stages of approval and their enforcement would begin soon after. This would help
regulate the food industry from using trans-fats in the foods they sell to people in hotels and other food outlets. Research on the trans-fats and its implication on health need to be documented.

- There is need for policy direction on the utilization and prioritization of resources directed to the health sector. The role of health sector is to ensure the Kenyan citizens have good health which could be achieved better through increased provision of preventive services yet our budgetary allocations are biased towards curative services. The effects of preventive services need to be documented in order to help in paradigm shift from curative to preventive health care services.

- There is need for advocacy and capacity building in the policy, planning and budgeting for the purposes of mainstreaming the social determinants of health in all the sectors.

- The contributors to the wellbeing of the Kenyan populations need to debate of the leadership of the social determinants of health implementation agenda. Some of the suggestions tabled were that SDH should be housed at the National Economic and Social Council under the office of the President and the National Environmental Council.

- In future a meeting to inform more senior policy maker in government on the social determinants of health and evidence on how these determinants have influenced our health outcomes should be carried out. This then calls for a more vigorous policy oriented research on SDH.

- There is need to explore the best mechanisms for inter-sectoral collaboration based on the existing evidence in the country on the country’s health indicators in relation to various sectors performance factors. More research on the best mechanism was advocated to achieve this goal.

- The renaming of the social determinants of health to human well being will make the concept more attractive to the other non-health sectors and this will encourage them to buy in to the idea. It appeared the term social determinant was still a new concept. Majority of the sectors need to be sensitized on the
concept. Accountability of our actions as individuals is needed to enhance more safety and well being on the Kenyan population.

- The participants were also curious to find out if there is an issue of lack of patriotism among the Kenyan citizens in regards to the implementation of our strategies and how this affects our health indicators.

Deliberations on Research issues in health on the second stake holders meeting

The second stake holders meeting was a one day meeting held September 18 2012. The participants were sampled and invited from the list in our annex1. This ensured that the participants were drawn from government ministries, international NGOs and private sectors with a stake in SDH.

The key objective of this stake holder meeting was to determine the needs for building research capacities for health and its social determinants in the country. Four specific objectives that guided the deliberations included:

- Sensitizing the participating institutions on research for health and its social determinants and the goal of building sustainable capacities;
- Identifying health equity and social determinants research capacities within the sectoral institutions;
- Identifying institutional linkages that could be used in building sustainable research capacity for health and its determinants;
- Proposing a collaboration framework on the implementation of research capacity building programme for health and its social determinants.

The presentation started by re-emphasizing the definition of SDH as defined by World Health Organisation Commission on Social Determinants of Health (CSDH) as “the conditions in which people are born, grow, live, work and age, including the health system. Literature on social determinants demonstrated that there is need to go beyond controlling disease at the individual level and address other contributors to disease, including the social and environmental determinants of health.
To summarise the dynamic process of SDH as provided in the literature, an interactive scheme of social determinants of health and the levels at which they come into play were clearly demonstrated by the use the popular CSDH(2008) figure 1 which shows the schematic configuration of the interaction between SDH.

Figure 2: Schematic configuration of the interaction between SDH

Source: WHO 2008

Having been introduced to the most important figure in the world of SDH; the stakeholders were later taken through the SDH-Net Kenya conceptual framework on the transmission mechanism of SDH to health outcomes/impact as provided in Table 1 above. The framework was developed in line with demonstrating how research activities in SDH could be easily modeled as a first step towards developing testable hypotheses between social determinants and health outcomes. One of the major criticisms observed on the framework was that, it did not demonstrate how other sectors were impacted by health sector. It is after this realization that Kickbush (2008) and Mwabu (2011) suggested frameworks were found to be usable in closing this gap.

Another key area of presentation was on building Sustainable Research Capacity for Health and its Social Determinants. The concept of health research was described as generation of new knowledge using the scientific method to identify and deal with
health problems. It was argued that although locally generated, once created; such knowledge is a local, national, and an international public good. It is in this dimension that funding modalities in research can take local, regional or international perspective.

The presenter observed that health is a state of complete well being which then meant that its source cannot be medical care alone. This then had the implication that population health is determined by medical and non-medical activities. There is no sector of the economy that does not contribute directly to better health. This is the essence of the concept of Health-in-all policies (The Adelaide Statement, 2010; and WHO, 2008). According to the researcher, evidence generated through health research serves at least four purposes:

a) Identifying and ranking health problems.

b) Solving health problems directly.

c) Developing new health care technologies and health systems.

d) Expanding the frontier of knowledge about what health is.

To build sustainable research capacity in SDH in Kenya, the researcher observed five key components which included; inputs (resources), institutions, Systems and networks (local and international), Learning-by-doing and implementation of research.

The key mechanisms for sustaining research capacity in social determinant in health was explained as comprising of five elements which included:- developing Internal and external funding of research & training activities; formation of professional interdisciplinary and multi-disciplinary associations; formation of annual, biannual, biennial meetings of allied professional health associations and other stakeholders; and development of professional journals.

The concept of building social determinants health research Capacity in Kenya “Through Learning by Doing” was discussed by the researcher as way of developing programs that should promote health in all policies approach. Such programs need to be
researched upon and their service provision established and promoted in public and private sectors. It was noted that for this to succeed, a combination of resources, institutions, networks and partnerships is needed to establish these programs. Some of the programs mentioned under the concept of “Through Learning by Doing” included:

- Building capacity for teachers to carry out growth monitoring among children in early childhood education centers.
- Interventions against HIV infections and drug abuse
- Child protection and support for children with special learning needs
- School infrastructure and safety
- Road safety collaborations between the Ministries of Road and Public Health & Sanitation
- Slum upgrading and housing of street families

The presentation concluded that strong health research capacity is a requisite for good health; analysis of social determinants of health; level of development and equity in development. Research orientation gives evidence of the necessity for health in all policies.

**Recommendation on Research Capacity on Social determinants from the second stakeholders meeting on SDH in Kenya**

- The lack of legal autonomy especially on health issues affecting women impacts on their access to health care as they depend on other people/ the community to make choices for them including health related ones.
- The research agenda in health needs to look at the actors, needs, capacities, gaps and sustainability issues. It also needs to find mechanisms through which all this issues can be looked at together.
There is a lot being done in the Ministry in relation to social determinants of health but due to weak monitoring and surveillance vital information gets lost within the system. The health sector in collaboration with other sectors needs to use research to enable the development of indicators that can be used to measure progress in SDH in the country.

SDH needs to be mainstreamed into the health workforce by integrating it into the health curriculums of tertiary learning institutions involved in training health officers.

Direct taxation is based on income thus has an element of fairness. Indirect taxation is not fair as both the rich and poor pay the same taxation, but if reduces it will limit incentive to the trade and industry sectors. The most resent increments in fuel prices in the country saw the highest increment go to the taxation of paraffin yet it’s the most utilized fuel product by the poorer in society. This was seen as a clear indicator of social injustice. Research needs to be carried out to inform on where this indirect taxes can be applied in a fairer way.

There is need to focus outside health outcomes when looking at SDH, thus the need to introduce developmental outcomes. To find the impact on development we need to make a case on how the health impacts/outcomes are affecting the broad SDH.

It was noted that there is no sector in the economy that does not have a direct impact on health outcomes.

Prepare a framework for the implementation of the Capacity Building programme in research capacity for SDH by 30th October, 2012;

Through the project’s support in collaboration with other programs the establishment of an SDH research programme in the School of Public Health, University of Nairobi will be carried out;
• The School of Public Health will coordinate the research arm of the national SDH business plan and will also carry out the implementation;

• Synergy of the SDH activities occurring in the Ministries on Health, University of Nairobi and World Health Organization- Kenya should be carried out. This will maximize on the utilization of existing SDH resources existing in the mentioned institutions.

Gaps, Conclusion and the way forwards

From the foregoing it is clear that a lot of work need be done for sensitization of SDH in Kenya. The concept is still very new among the sectors that are thought to be very close to health. Evidence base to demonstrate correlations between the health of the population and the non-sectors need to be established. A key finding on the deliberation resulting from the stakeholders meetings is that most of the other sectors that house social determinants of health are keen to understand how health itself affects their activities in order for them to incorporate health policy in their strategic plans. This then implies that there is a lot of work that needs to be done to create a permanence in the feature of social determinants of health in the programs of non-health sectors.
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Annexes:

Annex ONE

1. **Key bodies or mechanisms constituting the national research system for health**
   - Kenya Medical Research Institute (KEMRI)
   - Ministries of health and other government ministries and agencies relevant to SDH
   - Kenya Institute of Public Policy Research and Analysis (KIPRA)
   - African Economic Research Consortium (AERC)
   - Kenya National Bureau of Statistics
   - Local and international NGOs in health
   - National Public and Private Universities with Medical, Humanities and Social Sciences disciplines

2. **Key policy making national institutions**
   - Ministry of Public health and Sanitation
   - Ministry of Medical Services
   - Ministry of finance
   - Ministry of planning and Vision 2030
   - Kenya Institute of Public Policy Research and Analysis (KIPRA)
   - Ministry of Agriculture
   - Ministry of Environments and Natural Resources
   - Ministry of Trade
   - Ministry of Education
   - Ministry of Higher Education, Science and Technology
   - Ministry of Water and Irrigation
   - Ministry of Housing
   - Ministry of Roads
   - Ministry of State and Development of Northern Kenya and other Arid and Semi-arid Regions
   - Ministry of Youth and Gender
   - Ministry of Sports
   - Ministry of Tourism
   - Ministry of Labour
   - Ministry of Industry

3. **List of national research institutions/ groups researching for health**
   - Kenya Medical Research Institute (KEMRI)
• Universities (university of Nairobi & Moi University’s College of Health Sciences, Colleges of Humanities and Social Sciences)
• Kenya Institute of Public Policy Research and Analysis (KIPRA)
• African Economic Research Consortium (AERC)
• Kenya National Bureau of Statistics
• Africa Medical and Research Foundation (AMREF)
• African Population and Health Research (APHR)
• Centre for Public Health Research
• Institute of Policy Analysis Research
• National Council for Science and Technology (NIST)
• Pharmacy Service and Research Associates
• Physicians and Medical Workers for Social Responsibility
• Consumer Options
• Centre for Disease Control and prevention (CDC)

4. List of main national and international public and private financiers supporting research for health

Government Funding
• Central government revenue
• Local/municipal government revenue
• National Social security funds

Funding through Bilateral Agreements
• Government of Australia
• Government of Austria
• Government of Belgium
• Government of Canada
• Government of Denmark
• Government of Finland
• Government of France
• Government of Germany
• Government of Greece
• Government of Ireland
• Government of Italy
• Government of Japan
• Government of Luxembourg
• Government of Netherlands
• Government of New Zealand
• Government of Norway
• Government of Portugal
• Government of Spain
• Government of Sweden
• Government of Switzerland
• Government of United Kingdom
• Government of United States
• Government of People's Republic of China

Regional Development Banks

• African Development Bank
• Asia Development Bank
• Latin America Development Bank
• Caribbean Development Bank
• Islamic Development Bank

United Nations Bodies and Agencies

• World Health Organization (WHO)
• Bureau of the Economic and Social Council (ECOSOC)
• Food and Agriculture Organization of the United Nations (FAO)
• International Labour Organization (ILO)
• International Organization for Migration (IOM)
• UNAIDS Secretariat
• United Nations Children’s Fund (UNICEF)
• United Nations Development Fund for Women (UNIFEM)
• United Nations Development Programme (UNDP)
• United Nations Educational, Scientific and Cultural Organization (UNESCO)
• United Nations High Commissioner for Refugees (UNHCR)
• United Nations Human Settlements Programme (UN-HABITAT)
• United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)
• United Nations Office on Drugs and Crime (UNODC)
• United Nations Population Fund (UNFPA)

Regional and multilateral bodies and Foundations

• European Commission
• The Global Fund to Fight AIDS, Tuberculosis and Malaria
• World Bank (WB)
• World Food Programme (WFP)
• International HIV/AIDS Alliance
• Action AID
• Aga Khan Foundation
• Association François-Xavier Bagnoud
• Bernard van Leer Foundation
• Bill and Melinda Gates Foundation
• Bristol-Myers Squibb Foundation
• Care International
• Caritas Internationalis/Catholic Relief Services
• Deutsche Stiftung Weltbevölkerung
• Diana Princess of Wales Memorial Fund
• Elizabeth Glaser Pediatric AIDS Foundation
• European Foundation Centre
• Family Health International
• Foundation Mérieux
• Health Alliance International
• Helen K. and Arthur E. Johnson Foundation
• International Federation of Red Cross and Red Crescent Societies, International Committee of Red Cross and Red Crescent
• National Red Cross Societies
• King Baudouin Foundation
• Médecins sans Frontières
• Merck & Co., Inc
• Plan International
• Population Services International (PSI)
• SIDACTION
• The Clinton Foundation
• The Ford Foundation
• The Henry J. Kaiser Family Foundation
• The Nuffield Trust
• The Open Society Institute/Soros Foundation
• The Rockefeller Foundation
• United Nations Foundation
• Wellcome Trust
• World Vision
• International Planned Parenthood Federation
• Order of Malta

Annex TWO Questionnaire on knowledge production

Members Participation in Social Determinants of Health Workshop Held at Silver Spring Hotel, Nairobi on 18th September 2012

Please TICK where necessary and use the space provided to write your response.

Knowledge Production on SDH

Part A: Social determinant of health Sectoral participation

1. Indicate your organization and whether academic, Research etc

Name:
Category (e.g. Research, Academic, International organization, Ministry, etc)

Your position in the organization

2 Indicate why you think it is important that organizations/sectors/ministries should address the role of social determinants to the health of population.

3. According to you, who should assess and report on the social determinant of population health? (E.g. ministry of health, all sectors, international organizations, etc)

**Part B: Social Determinate of Health Research, Support and guiding principles**

4. Has SDH been identified as a priority area in your organization? Yes/no/don’t know

If yes please indicate particular area that your organization is addressing (e.g., advocacy area, research, community involvement, financing, Advisory services, etc)

If no, why do you think this is the case?

5. How is your Organization addressing social determinants of health?( e.g. HIV programs, Research, community multi-sectoral collaborations on health related needs, access to food, fair wage etc)

6. Do you have some advocacy effort related to the SDH? Yes/NO/don’t know

If yes mention (e.g. ant-smoking, food advocacy, clean environment, recreation facilities, transportation issues, affordable houses etc)
7. As an organization do you have or use specific population health indicators to inform your work on SDH? Yes/No/don’t know

If yes mention. (E.g. birth weights, Depth of Poverty, Deprivation Index, Early Development Instrument, Depth of Poverty, etc)

8. Identify practice, tools, strategies or other resources that you think would be helpful to your organization to address the SDH. (E.g. Participation in sectoral consultations, increased funding to health related activities, support of community coalitions etc.)

Part C: Partnership in Social determinants of Health

9. Please mention community partnership if any that you partner with to address SDH. (E.g. Schools, churches, sport activities, youth partnerships, etc)

10. Is your organization involved in financing research or any other undertaking in SDH? Yes/No/don’t know

If yes, please indicate the aspect that your organization finance or support (e.g. HIV/AIDS interventions, Epidemiological studies, road accidents, healthy lifestyles, food production etc)

11. Does your organization receive any form of support to incorporate SDH in its strategic plans? Yes/No/don’t know
If yes what kind of support does it get? (E.g. Material support, financial support, training support etc)

Part D: Policy issue, Challenges and Gap in social determinant of health

12. Identify some additional important role that your organization could undertake to take action on SDH.

13. Does your organization have policies touching on SDH? Yes/No/don’t know

If yes please mention (e.g. strategic plan has included health policy issues relating to health)

If no what could be the reason(s)?

13. Highlight some challenges that your organization is facing to better address the SDH. (e.g. Finance, lack of training on SDH related, lack of awareness among workers, lack of support from other sector etc)

14. Rank at least three items that would be of great assistance to strengthen your organization action to address SDHs (e.g. Funding, training on SDH advocacy, Tools for addressing SDH, support structure for sharing of information on SDH, engagement of internal and external stakeholders, etc)
Over recent decades, international health agendas have tended to oscillate between: (1) a focus on technology-based medical care and public health interventions; and (2) an understanding of health as a social phenomenon. Recent accumulated evidence has however, pointed that existing health policies have failed to reduce inequities and momentum for new, equity-focused approaches.

This has led to the realization that the primary factors that shape our health are not limited to medical treatments or lifestyle choices but rather the living conditions we experience, requiring more complex forms of intersectoral policy action.

The 57th World Health Assembly held in 2004 passed a resolution on the formation of the commission on the social determinants of health which was to marshal evidence on what can be done to promote health equity, and to foster a global movement to achieve it. The commissions report “Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health” clearly establishes that dramatic inequalities in health and healthcare exist worldwide and affect individuals in places where they are born, grow, live, work and age, including the health system. There is an urgent need to form partnerships and guide intersectoral action in achieving our national health agenda within our government systems to expedite the reduction of these inequities as we work towards building a healthier nation.

It is in this regard that our Ministry would like to carry out a review and analysis of health impact indicators and their associated social determinants in Kenya using the available data. This will be done through the review of both health and other line ministries completed reports or studies and other guiding documents and also through key informant interviews with the top policy makers where necessary. The information acquired will be used to prioritize key areas for deliberate action in tackling existing health inequalities.
Two consultants Prof. Joseph Wang’ombe and Dr. Moses Muriithi have been brought on board to carry out this review on behalf of the ministry. This activity is to be carried out in the next two weeks. We humbly request you to provide them with your necessary support.

We look forward to your Ministry’s cooperation and active participation.

Mark K. Bor, CBS
PERMANENT SECRETARY

Annex Four: 2nd Stakeholders day Workshop

Venue: Silversprings Hotel

Date: 18th September, 2012

<table>
<thead>
<tr>
<th>18th SEPTEMBER, 2012</th>
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<tbody>
<tr>
<td>8.00AM- 8.30AM</td>
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<td>9.00AM-9.05AM</td>
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SESSION 1

| 9.05AM- 9.35AM      | Overview of SDH (Global, Regional & National) | Dr. Christine Kisia |
| 9.35AM- 9.45AM      | Discussion                                   | Dr. Peter Njoroge |

TEA BREAK (9.45AM- 10.00AM)

SESSION 2

<p>| 10.00AM- 10.30AM    | Research capacities for health | Prof. Joseph Wang’ombe |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Host</th>
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<tbody>
<tr>
<td>10.30AM- 11.00AM</td>
<td>Identification of participating institutions SDH research capacities</td>
<td>Participants</td>
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<tr>
<td>11.00AM-11.20AM</td>
<td>Discussion</td>
<td>Dr. Moses Muriithi</td>
</tr>
<tr>
<td>11.20AM- 11.50AM</td>
<td>Overview on building sustainable research capacity for health and its social determinants</td>
<td>Prof. Germano Mwabu</td>
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<td>11.50AM -12.00NOON</td>
<td>Discussion</td>
<td>Dr. Urbanus Kioko</td>
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<tr>
<td>12.00NOON - 1.00PM</td>
<td>Group work</td>
<td>Dr. Isabella Ayagah</td>
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**SESSION 3**

**LUNCH (1.00PM- 2.00PM)**

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<tr>
<td>2.00PM- 2.30PM</td>
<td>Group work continued</td>
<td>Participants</td>
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<tr>
<td>2.30PM- 3.10PM</td>
<td>Group presentations</td>
<td>Dr. Mercy Mugo</td>
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<tr>
<td>3.10PM- 3.40PM</td>
<td>Way forward</td>
<td>Prof. Joseph Wang’ombe</td>
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<tr>
<td>3.40PM- 3.45PM</td>
<td>Announcements</td>
<td>Secretariat</td>
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<tr>
<td>3.45PM- 4.00PM</td>
<td>Closing</td>
<td>Dr. Salim Hussein</td>
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**TEA BREAK (4.00PM- 4.15PM)**