Somali-Swedish Research Cooperation for Health (SSRCH)

- a Joint Initiative by six Somali and five Swedish Universities

A Planning Document

August 30, 2019

Members

Somali Universities: Mohamed Mohamud Hassan Biday (Professor, Rector), Benadir University; Said Ahmed Walhad (Professor, Principal), College of Health Sciences at Amoud University; Abshir Ali Abdi (Professor, Dean), Faculty of Medicine, East Africa University; Deria Ereg (Professor, Dean), College of Medicine and Health Sciences at University of Hargeisa; Mohamed Hussain Aden (Professor, Dean), Puntland University of Science and Technology; Abdulkadir Mohamed Shirwa, (Professor, President), Galkayo University.

Swedish Universities: Maria Emmelin (Professor), Lund University; Lars L Gustafsson (Professor), Karolinska Institutet; Anneli Ivarsson (Professor), Umeå University; Marie Klingberg-Allvin (Professor), Dalarna University; Mats Mållqvist (Professor), Uppsala University; Fatumo Osman (Lecturer), Dalarna University; Klas-Göran Sahlén (Lecturer), Umeå University; Stig Wall (Professor Emeritus), Umeå University.

Somali-Swedish Researchers' Association (SSRA): Yusuf Abdulkadir (MD); Yakoub Aden Abdi (MD; PhD), Lennart Freij (Associate Professor); Annika Johansson (PhD); Khalif Bile Mohamud (MD; PhD); Marian Warsame Yusuf (MD; PhD), Mohammed Hassan Ali (MD).

Contents

0. Executive Summary

The Somali-Swedish Research Cooperation for Health (SSRCH) initiative builds on collaboration between six Somali universities (East Africa University, University of Hargeisa, Galkayo University, Benadir University, Puntland University of Science and Technology, Amoud University), five Swedish universities (Umeå, Lund, Uppsala, Karolinska Institutet and Dalarna) and the Somali-Swedish Researchers' Association (SSRA, a small Swedish NGO). The initiative aims at developing a health action-oriented programme for country-based research and at strengthening research capacity of relevance to Somali development as well as to Swedish development cooperation with Somalia and other fragile states. The participation of SSRA has helped establish a valuable link to the Somali diaspora, with contextual knowledge and academic competence.

This document gives a brief description of previous Swedish research cooperation with Somalia, which was interrupted by the civil war, and of a series of seminars and workshops, which started in 2014, aiming at reviving the cooperation between Somali and Swedish universities in research for health. A brief account is given of the present health and health sector challenges in Somalia and of the crucial importance of promoting the development of public health relevant and action oriented research.

A trustful cooperation between the parties has developed and so far a jointly organised research training course has been successfully carried out with students recruited from among junior faculty staff at the Somali universities and health authorities. Minor field studies addressing local major health problems were carried out and 16 students were awarded diplomas, three of them with distinction.

The collaborating parties now propose the organisation of a second research training course. Other activities in the short term will be the launching of a Somali Health Action Journal, a training programme for the establishment of demographic surveillance sites for use of Somali health researchers and workshops for the joint, detailed planning of the long-term programme of cooperation.

The long-term programme will take a broad and comprehensive approach in the strengthening of health research capacity at the Somali universities, including researcher training at both MSc and PhD levels.

A preliminary cost estimate has been made for the short term activities 2020-21 and a plea is made to external funding agencies for financial and other support, which could, hopefully, extend also beyond this period.

1. Somali-Swedish collaboration in health research - a historical background

Health research has a key role in rebuilding national health services and trusted social institutions in fragile countries that are recuperating from civil unrest and natural emergencies. This is the conviction of the representatives of six new Somali universities (East Africa University, University of Hargesia, Galkayo University, Benadir University, Puntland University of Science and Technology and Amoud University), five Swedish universities (Umeå, Lund, Uppsala, Karolinska Institutet and Dalarna) and Somali diaspora as well as Swedish professionals in SSRA (Somali-Swedish Researchers' Association) behind this proposal. It is an initiative to revive the previous Somali–Swedish Research Cooperation, which started in 1981 and was cut short by the civil war in Somalia in the 1990s (1).

In the early 1980s an agreement on research cooperation was signed between the Somali Academy of Science and Art (SOMAC) and the then Swedish Agency for Research Cooperation with Developing Countries (SAREC). Several faculties of the former Somali National University (SNU) became engaged in multi-sectoral research collaboration with more than 10 Swedish universities and research institutions. The main goal was the strengthening of national research capacities by assigning research students to projects identified and based in their home country. They alternated fieldwork at home with periods for courses, laboratory work, data analyses and supervision in Sweden. The research training and cooperation was termed 'the sandwich model'. These partnerships in health, social, veterinary, and agricultural sciences lasted for 10 years until they were involuntarily disrupted by the civil war in the early 1990s.

The majority of the projects were within the health sector, addressing the Somali public-health challenges of that time. Most of them were community oriented, using epidemiology and population-based research methods. After the outbreak of the civil war in 1990, several Somali researchers had to remain in Sweden to complete their theses. In this way more than 20 Somali researchers were awarded masters and/or doctoral degrees. Some of them pursued a career in Sweden, while others were employed by international organisations. During the post–civil war era, some of them became engaged in the revival of medical education and allied health sciences institutions in Somalia/Somaliland.

Contacts between Somali and Swedish participants in the collaborative programme have been maintained, not least through the formation in 1993 of SSRA, a small Swedish NGO, which has supported several health interventions, working with local Somali civil society organisations and the new universities that have emerged in post-conflict Somalia. In 2014 a joint initiative, drawing on the experiences and the legacy of the previous research cooperation, was taken to respond to the need for health research and research capacity development in present day Somalia. It is based on the strong conviction of both Swedish and Somali scientists and professionals that this could be a highly relevant component in Somali-Swedish development cooperation.

2. Current health and health system situation in Somalia

The Somali health system has passed through three long decades of disruption due to the extended civil conflicts and the high rate of insecurity in large geographical areas, which has led to the paucity of and poor accessibility to essential health services. The deteriorating socio-economic and political situation in Somalia has led to under-5, infant and neonatal mortality rates and maternal mortality ratios which are considered to be the highest in WHO's Eastern Mediterranean Region (EMR). The low number of health care professionals (only 23 per 10,000 population) and their low performance skills as well as their uneven distribution has seriously compromised the quality and the outreach of the health facilities, particularly for the nomadic and rural populations.

Health care services are thus unable to provide sufficient reproductive, maternal, neonatal, and child health services to people who are residing in nomadic and rural settings and to the 2.6 million internally displaced persons, altogether about 60% the country's population. This makes it imperative to create unimpeded access to essential health services. Other factors with devastating health effects were the repeated droughts and the two famines of 2011 and 2017 when cumulatively half a million people were wiped out. In the transition to recovery it is time to consolidate the delivery of essential health services and translate these into better health and nutrition outcomes.

Health policies and strategies are being formulated and progress in their implementation is underway. A National Health Sector plan has been developed as part of the National Development Plan. With focus on key priorities the goal is to achieve Universal Health Coverage, leaving no one behind. For the hard to reach areas, the government is considering the deployment of trained Community Health Workers and Auxiliary Midwives that provide preventive and basic primary health care services, while linking these underprivileged communities, as necessary, to the network of the district health system and its referral support. A District Health Information System has been initiated. A National Medicines Policy as well as a National Medicines Supply Chain Master plan have been developed. Programmes for routine immunisations of children are supported by the international Vaccine Alliance (GAVI) aiming at increasing coverage from 50-60% to 85-90%. Recent severe outbreaks of cholera have been curbed and prevention programmes are being designed.

But many health problems remain largely unattended. Malnutrition among children, mothers and adolescent girls is still highly prevalent. Tuberculosis, HIV/AIDS and malaria are endemic communicable diseases for which control is failing. The prevailing humanitarian conditions demand meaningful efforts to strengthen emergency preparedness and response capacity, to improve access to essential lifesaving health services and to mitigate communicable disease outbreaks through coordination and effective community participation.

3. Need for research on Somali health problems and health system

The Somali health care system is a complex environment where serious challenges impede the population's access to health services, and where the prevailing cultural characteristics often delay or thwarts the care seeking of mothers and other vulnerable groups of the society. The low levels of trust that the clients have in the health workforce may also limit the utilization of available services, while the geographical distance and insecurity are real barriers in many districts and regions. Based on the above, a major challenge is the know-do-gap, where

programmes with known and proven effectiveness fail to deliver adequately. The latter include the poor compliance with DOTS tuberculosis treatment, the limited demand for routine immunisation and antenatal care and facility-based delivery, the low impact of counselling on breast-feeding, failing the timely care seeking for many communicable diseases, etc. All these areas demand imbedded implementation research to generate solutions to improve performance. Action oriented health research and the research evidence so generated will:

- Advance knowledge and create inputs to a beneficial decision-making process while contributing to the attainment of the desired health outcomes through relevant policies.
- Contribute to the performance and quality of the health system such as improving patient care.
- Provide tangible opportunities to the engaged health professionals to enhance their knowledge and opportunities for continuing education.
- Identify areas of public health where deeper research investigation is required.
- Link the research interventions with the needs of the national health system to resolve the barriers encountered in implementation and design solutions that facilitate performance.
- Provide the opportunity to identify health risks in order to subsequently design the relevant health interventions and necessary behaviour change communication.
- Offer the opportunity to closely link the policy makers to the service delivery and assess the fit between the research and health services' implementation process.
- Help in identifying future research needs for the different service delivery levels of the health system.

Thus there can be no doubt about the tremendous advantages of linking academic teaching and research institutions with the public health sector network of services at federal, state and regional, district and community level. In the fragile Somali health system, there is a clear and mandatory research imperative, to effectively guide the health system recovery process. The latter will harmonise health system performance and effectiveness by integrating the resilience generated by humanitarian interventions and sustainability of development programmes, thus ensuring the coherence and complementarity of these interventions across the country.

4. Reviving the collaboration

Our initiative has developed during the past five years, basically through individual perseverance and own resources, aiming at reviving the previous collaboration. The initiative is based on the recognition that the delivery of equitable, affordable, and sustainable health care services to the population in a fragile state is a huge challenge where national academic institutions have a key and collaborative role in promoting health development and sustainable health services. Fragile and poor states will not succeed in the prevention, diagnosis, and treatment of important health conditions and diseases unless they invest in research and higher education.

Our initiative started in 2014 with a seminar hosted by the Dept. of Epidemiology and Global Health, Umeå University, financially supported by Sida via the Nordic Africa Institute (2). Here, representatives of the engaged six Somali and five Swedish universities committed to work for health research as a key component in the Somali national rebuilding process and to bridge the gap between knowledge and action in the country. As a result, a joint statement, "Healing the health system after civil unrest" was published in an international scientific journal (3). A follow-up workshop was held in Umeå in 2015 (4) with the aim of translating the

aspirations set by the previous seminar into action, creating a platform for research capacity building. It had 28 participants, representing three groups of partners: five Swedish and six Somali Universities, as well as the SSRA. The strong, active Somali participation is reflected by the fact that each of the participating Somali universities organised a pre-workshop seminar.

We believe that the 2014 and 2015 meetings were instrumental for the creation of contacts between the Somali universities across the politically diverse geographical zones. This has built trust across the Somali regions and has created opportunities for universities and colleges to jointly support the reconciliation processes within Somalia (8).

A joint action programme for capacity building in health research was agreed on and research training of faculty staff at the Somali universities and Ministries of Health was given a priority. This resulted in a "training of trainers" (ToT) course in health research methodology which was held during 2016-2018.

The course was organised and carried out jointly by the Somali and Swedish universities. Each of the Somali universities and Health Ministries nominated faculty staff and consequently all Somalia regions had representatives in the course. During a 2-week start-up session in Hargeisa in 2016 faculty staff from the Swedish universities provided an intensive and interactive education in health research methodology, encompassing both quantitative and qualitative methodologies (5). The Somali universities had beforehand selected topics for health research projects that the students carried out over the next years with joint guidance from Somali and Swedish supervisors, the latter support given mainly using web-based communication channels.

A mid-term follow-up seminar was held in Hargeisa in 2017 where the participants received comments on their draft thesis reports (10). The final seminar for thesis presentations and discussion took place in 2018, also in Hargeisa, with participation of faculty staff from the Swedish and Somali universities (11) and by Dr Abdul Gaffar, Director at WHO of the Alliance for Health Policy and Systems Research (AHPSR). Out of the 21 students starting the course, 16 successfully finalised their thesis work, acknowledged by a certificate from Umeå University. The three course participants that passed with distinction were offered a one-month visit at a Swedish university to take part in the academic life and develop their thesis into a publishable scientific paper. These visits were facilitated by scientific advice from their Swedish supervisors and had financial support from AHPSR. Many of the course participants have subsequently been promoted within their university to positions with higher responsibilities.

In 2017 the Swedish based SSRCH participants had a meeting with Sida, also involving the Ministry of Foreign Affairs and the Swedish embassy in Nairobi. We recall a generally positive response, in particular as the SSRCH was seen to have a potential role as a model for Swedish research cooperation with fragile states in general. We further elaborated on this in a debate article in Dagens Nyheter the same year, in which we pleaded for both acute and long-term development aid to Somalia including support for the strengthening of research capacity (7). Isabella Lövin, Minister for Development Cooperation and Climate, published a comment in the same newspaper (8) where she pointed out that a new strategy for development cooperation with Somalia was being prepared and she expressed interest in our working model.

So far, the Somali and Swedish universities have financed the SSRCH initiative, including the ToT course, predominantly using own resources. Some of the meetings and consultations for maintaining and developing the collaboration have received external financial support from the

Nordic Africa Institute, the AHPSR and SIGHT, the Swedish Institute for Global Health Transformation.

In 2018 key persons from the SSRCH, representing all the participating Somali and Swedish universities and SSRA, had a 2-day meeting at Umeå University to sum up achievements so far and make short- and long-term plans for future training and research capacity strengthening (12). The following sections of this document present summaries of and reflections over these plans paving the ground for a revived long-term Somali-Swedish health research collaboration.

5. Short-term plans

The short-term aim of our initiative is to consolidate the ongoing cooperation, offer basic research training to an extended group of Somali university staff members, to prepare for a long-term collaborative programme involving both Swedish academic institutions and Somali universities as well as health system institutions at both federal and regional levels. The parties have agreed on the following:

- to organise a second research training course to enable young Somali faculty staff to build research and teaching capacity and give opportunities for postgraduate research training;

- to launch a Somali Health Action Journal for disseminating research and policy documents contributing to the translation of research evidence into policy and practice;

- to create training possibilities for faculty staff on the organisation and management of Health and Demographic Surveillance Sites (HDSS); and

- to arrange workshops for detailed planning of the long-term collaboration regarding capacity building and research priorities.

A second research training course

The outcomes of the first research training course were thoroughly evaluated by the course examiners and both Somali and Swedish partners have labelled the course a successful activity, feasible to be executed within a fragile country context. Not to lose momentum it is of great importance to be able to continue with a new batch of students for a second TOT course starting in 2020.

The second course will put special emphasis on the development of a research protocol/plan allowing participants to gain necessary skills without being overwhelmed by exhaustive field engagement. The course participants will, as previously, be selected from the participating universities and federal and regional health institutions. Since we foresee that three new universities will be included in the collaboration, among them the National University of Somalia, we expect a total of approximately 30 participants.

The course will be a part-time diploma course lasting for two years. It will be conducted by teachers from the Swedish participating universities in close collaboration with co-teachers from the participating Somali universities, including selected participants from the 1st batch of students. The course work will be divided into four parts:

- two weeks of face-to-face theoretical training sessions;
- own work with study protocol and planning for field work;
- one week of face-to face follow-up seminars; and
- three days of presentation and examination seminars.

The theoretical sessions will focus on understanding and applying both quantitative and qualitative methodologies. Ethical considerations will be discussed and the students will also get familiar with basic concepts in health economics. These sessions will form the basis for the development of the study protocol that should focus on an identified health issue of relevance for the Somali context and tested in practice. The participants will be provided Swedish and Somali supervisors and the examination will be based on a written report describing the study protocol and discussion of the field experiences.

Based on the grading of the report, ten students are suggested to be selected for moving into a 1-year master of health sciences at a Swedish or Somali university. The aim is for the students to be able to use their study protocol to conduct a more extensive study "in real life" as a basis for a master thesis. A basic idea of the teaching support is that the program will encourage Somali co-teachers to stepwise increase their involvement and responsibility for similar courses in the future and subsequently to reduce the Swedish engagement. To increase the long-term capacity building these co-teachers will be potential candidates for PhD scholarships offered within the programme.

A Somali Health Action Journal

The mission of developing a Somali health journal has been discussed during seminars and workshops. The Somali universities have collectively proclaimed their support to this initiative, indicating their commitment to translate the plans into practical steps by creating a governance and budgetary mechanism for a journal. A journal committee has been formed and deliberations by the committee have resulted in a strategy for launching a regularly published journal by the name of "Somali Health Action Journal (SHAJ)". The Somali-Swedish Researchers' Association (SSRA) will host the journal during its first two years, later to be transferred to the Somali universities, who are the ultimate owners of the journal. The Somali universities see this as part of improving their role in research and as a mechanism for translating research evidence into policy to ensure its practical application.

The process of creating an editorial team with a chief editor, co-executive chief editor and a managing editor has started alongside the formation of an editorial board. A journal advisory panel consisting of Somali, Swedish and other internationally reputed scholars will also be formed to act as potential peer reviewers. The journal publications are planned to include research contributions aimed at advancing public knowledge, articles on policy and operational solutions that will improve the implementation of health programmes, technical guidelines and short reports from health managers. They are all envisaged to contribute to health system strengthening by focusing on Somali public health issues while sharing also experiences from other fragile conflict affected settings. SHAJ is expected to become a platform for the Somali universities and a central dissemination tool for Somali researchers. The participants of the first and second health research training courses can also be encouraged to publish their theses and reports in the journal as part of disseminating their results and study protocols.

As a starting point the editorial team has agreed on several commissioned articles that will focus on pertinent health issues and interventions in the Somali context. These articles will include reports from on-going projects on mental health, female genital cutting and the

magnitude of malaria and blindness in Somalia, a bibliometric review on who has published what on the health and health care in Somalia during the past 20 years as well as discussion papers on policy options for re-building the Somali health systems and the role of research networking for this process.

To enable the start of the journal an Open Journal System (OJS) software has already been purchased that can web-host the journal and has the necessary functions for editorial management, manuscript submission, peer review and editorial decision making. The initiation and annual costs for the first year of the OJS system have been covered by the Somali universities through a cost-sharing scheme.

Establishing Health and Demographic Surveillance Systems

Population registers are lacking in most low- and middle-income countries why the validity and representativity of many ad hoc surveys may be challenged. Health and Demographic Surveillance Systems (HDSSs) have the potential to give an accurate picture of the population and its health status in selected communities, especially in resource poor settings. This is done by regular monitoring over extended time periods of births, deaths, in- and out migration as well as morbidity. The data collected provides increased understanding of health challenges in specific populations, which is crucial for selecting relevant interventions for later scientific evaluation. The findings can be used for evidence-based policy-making, implying that limited resources are optimised to benefit health systems development and population health. There is a well-established global network of HDSSs entitled INDEPTH, presently covering almost four million people that collaborate around methods development, quality assurance, and research initiatives.

The participating Somali universities have identified that establishment of HDSSs would provide a valuable resource for both research and policy making. Some of the universities have already taken initiatives in this direction, but recognised that further training on management and maintenance is needed. We therefore plan to create opportunities for two faculty staff from each Somali university to be trained at the INDEPTH Resource & Training Centre in Accra, Ghana, or in a relevant neighbouring surveillance site. These persons can then be key players in forming a network for collaboration around establishing the much needed HDSSs in Somalia.

There are also lessons to be learnt from the previous collaboration where surveillance systems in two villages were the basic empirical infrastructure for the research portfolio as well as for the research training activities. Thus, thanks to the longitudinal collection of basic vital events we could show how child mortality trebled during the pre-war years predicting a collapsing society where 4 out of 10 children did not survive their 5^{th} birthday. It was obvious that much of this was preventable since half of the deaths were due to diarrhoea or respiratory tract infections and where one third of the deaths could have been prevented through vaccinations. Unexpectedly it was also revealed that female mortality was higher than male mortality, especially in reproductive ages.

It should not go without mentioning, that for the Swedish side it was both methodologically as well as culturally an eye-opener for how to conduct community-based research while listening to and involving the villagers themselves (1).

Workshops for detailed planning of the long-term collaboration
Annual workshops will serve to develop a road map for the long-term collaboration regarding capacity building and research priorities. The already participating six Somali universities have recognised the need to expand the collaboration to include also other Somali universities, such as the Somali National University. The modality for including additional universities will be jointly decided by the Somali and Swedish universities, also considering views of federal and regional authorities.

The workshops will aim to concretise further the plans for research contributing to universal health coverage and improving the health status of the Somali population, as discussed at the latest SSRCH workshop in October 2018 (12). The point of departure for the workshops will be the Somali national and regional strategic plans, as well as the Strategy of Sweden's Development Cooperation with Somalia 2018-2022. Research priorities will be discussed in view of the need to address challenges of the evolving Somali health system. Another aim would be to map the current health research situation in Somalia and the availability and use of international collaboration and support.

The workshops will include discussions about how the collaboration can further strengthen faculty staff career development and the research capacity at the respective Somali universities, based on the priorities set above and the experience of the ToT-courses. The aim will be to identify opportunitiesfor offering Somali faculty staff enrolment in advanced academic research training of either MSc/PhD or intermediate research training programmes at the Somali and Swedish universities.

6. Long-term plans – Prospects, Reflections and Expectations

A viable basis for the continued collaboration
Considerable efforts have been made by representatives of the universities on both the Somali and Swedish side as well of the SSRA to develop this initiative for collaboration and capacity strengthening in the field of health research in Somalia. It has been built on mutual respect and individual as well as institutional commitments from both sides.

The initiative has proven its ability to perform through the successful organisation of a first research training course including the completion and reporting of minor field studies in public health relevant areas.

Short term plans for continued cooperation have been worked out and are ready to be launched. They include a second research training course including field studies which will benefit the Somali universities and address important public health topics. It will also serve to recruit students for continued training and research at master's level. A Somalia Health Action Journal will be initiated. Workshops will be held for the detailed planning of a longer term programme.

Key elements in health research development

Health research has the power and capacity of bringing about positive changes in the health care system and thereby improving the health status of the target population. For this purpose, the short-term capacity building plans need to be backed up with a long-term research plan, predominantly targeting the underprivileged marginalised communities. There is an absolute recognition of the critical role of research in addressing the key public health interventions that

are of high priority in public health work to curb the high burden of disease. To improve the long-term prospects of health research implementation in the country, several strategies and partnerships need to be considered. They encompass the following:

- *Improve uptake of research to policy:* Many of the ill-health conditions causing mortality are preventable and amenable to affordable treatment and control, for which sufficient evidence has already been generated. Hence, the research uptake in terms of evidence use needs to be included in the long-term research plan. Involving both the academic and public health professionals as well as the targeted underprivileged social groups is a high priority. Moreover, the involvement of both policymakers and the community will inject a critical drive in research uptake.
- *Build capacity for research also in challenging localities*: Explore opportunities and approaches of capacity building in research such as providing online guidance to build research capacity and overcome the challenges of insecurity or operating in remote geographical locations. These may include the identification of and access to capacity building, educational and mentorship programmes guiding the different research teams and their respective institutions.
- *Collaboration and partnership evolve through mutual trust*: Building research collaboration and partnership matures through long-term planning and implementation. The current Somali-Sweden inter-university research collaboration provides a workable and effective mechanism for developing a shared vision and knowledge transfer. However, the scarce financial resources and lack of long-term support are potential barriers that need to be addressed.
- *Build resilience to evolving health risks*: Another long-term research planning domain, relevant to the Somali fragile context is the imperative of building resilience to the frequent risks of natural disasters and man-made conflicts that predispose the society to disease outbreaks, malnutrition and internal migration with poverty outcomes and excess mortality. The resilience building process coupled by implementation research would address the evolving service delivery bottlenecks and allow working with policy makers and communities to increase the use of evidence for policy and action.
- *Create research culture through collaborative learning:* It is a common misconception that research is purely an academic exercise of long-term nature which has little relevance to the field operations that need to produce quick and immediate results. On the contrary, a shared consensus has emerged among the partners that implementation research is an indispensable tool for health system recovery in fragile and conflict-affected states, as it guides health policies and programmes, producing evidence that resolves the local barriers and helps attain the widest possible access to health services by bridging the knowledge gap. The latter will invariably contribute effectively to morbidity and mortality reduction among those afflicted by the health consequences of a fragile environment.
- *Build research capabilities institutionally*: To mobilise the internal capabilities for research development of the partner Somali universities, there are three critical dimensions to consider: a) The human resource capital engaged in research training/implementation and guided by close mentoring supported by the ongoing research collaboration. Research mentoring is expected to improve productivity and career development; b) Supportive university settings where the relevant research teams, ethics guidelines, library and IT support, and research financing are all progressively evolving; and c) Implementation of research activities by extending support for research interventions through small scale grants, and ensuring that different research teams meet regularly to exchange experience and capacity and organise training sessions to enrich the university capacity for research implementation, production and dissemination of the relevant knowledge, skills and evidence. The above three dimensions can significantly improve the research capacity of these universities within a reasonable time frame.

Deliverables

The longer term programme of cooperation will aim at research also at MSc and PhD-levels and include a more systematic approach to the strengthening of research infrastructure and research culture at the involved Somali universities. Of special interest is the ambition to

cooperate between Somalia universities regardless of political divides and share resources in terms of infrastructure, training development of methods and strategies.

At the end of a 5-year period of cooperation our initiative has the potential to result in the strengthening of each of the participating Somali universities with trained researchers, perhaps 5-10 persons at MSc and 2-3 persons at PhD-level, in the completion of numerous public health relevant research projects and the build-up infrastructural resources in connection with research projects.

Our initiative offers possibilities for cooperation and coordination with the Ministries of Health in the region and with the planned National Institute of Health (NIH), which is under development with assistance from Sida and the Public Health Agency of Sweden. The development of demographic surveillance sites within our initiative could, for instance, be of special interest for NIH in organising surveys of communicable as well as non-communicable diseases. We feel also that our initiative would be of interest to Swedish health development cooperation with Somalia in general.

Our collaborative programme can be seen as preventive action, in its broadest sense, to counterbalance some aspects of the current global crisis, specifically those concerning refugees, poverty, climate change and terrorism. The programme represents a window of opportunity to show that well-designed and well-managed development aid can help to address the root causes of these problems bridging cultural barriers and creating hope and energy also in fragile states.

Finally we are grateful to Sida and AHPSR for initial support to our initiative. Universities, however, are dependent on external project funding for special initiatives like ours. It is our hope that Sida, AHPSR and other development agencies would extend necessary funding to the long-term implementation of our initiative to secure its potential contributions to Somali health development.

7. Budget items and cost estimates

For the short-term two-year period 2020-21 major activities are related to organising a second training of trainers course, recruiting ten master and two PhD candidates, launching the Somali Health Action Journal, initiating and training of staff for establishing and maintenance of three HDSSs and to run annual workshops for developing a joint research agenda for the longer-term

We have assumed that there will be 31 participants in the course and that four Swedish teachers will work together with 3 Somali co-teachers. Costs for Swedish teachers can partly be covered by Swedish universities but the major costs must be covered by external funders. In summary the cost of the two-year course for one student is estimated at 65 000 SEK

To launch and run the journal is expected to cost 250 000 SEK per year. The low cost presented is due to contributions from the Somali universities. Workshops are expected to have 20 participants from Somali and Swedish universities each and in addition 5 participants from SSRA. The costs for the HDSS is only to initiate and train staff.

In summary, the total cost for the short-term activities could be estimated at 4 MSEK. Potential funders will be supplied with estimates in greater detail.

For the longer term collaboration, the cost estimates will be worked out during the forthcoming workshops. It should however be mentioned that major costs will relate to master and PhD training and to the running of HDSS sites.

8. List of references

Below find a list of relevant publications from and around our initiative, which are available on the programme webpage: https://www.umu.se/en/department-of-epidemiology-and-global-health/collaborate-with-us/somali-swedish-research-cooperation/

1. Health Problems and Potentials for Change in a Rural African Community (Eds LÅ Persson & S Wall, Umeå 1995.

2. Action for Somali Health Research and Development. Report from the 2014 seminar compiled by Khalif Bile in collaboration with Lennart Freij and Stig Wall. Unit of Epidemiology and Global Health. Umeå: Umeå University and Somali-Swedish Researchers' Association; 2015.

3. Somali-Swedish Action Group for Health Research and Development. Healing the health system after civil unrest. Glob Health Action. 2015;8:27381. https://doi.org/10.3402/gha.v8.27381

4. Action for Somali-Swedish Collaboration in Research or Health. Report from the 2015 workshop compiled by Khalif Bile, Lennart Freij, John Kinsman, Anneli Ivarsson and Stig Wall. Umeå: Unit of Epidemiology and Global Health, Umeå University and Somali-Swedish Researchers' Association; 2016.

5. Somali-Swedish Research Cooperation for Health. A 1-year Health Research Training and Implementation Programme. A Report following a 2-week intensive start-up course on Epidemiology and Health Research Methods in Hargeisa , 16-27 October 2016, compiled by Khalif Bile jointly with the research partners' core team, Sweden; 2017.

6. Meeting on the need for support to fragile states. Notes from a meeting of Sida and the SSCRH group on February 1, 2017, prepared by Khalif Bile.

7. Dags för akut hjälp – och långsiktigt stöd till Somalia. Debate article in Dagens Nyheter, published 16 April 2017: www.dn.se/debatt/dags-for-akut-hjalp-och-langsiktigt-stod-till-somalia

8. Vi tar fram ny biståndsstrategi för Somalia. A reply to the debate article in Dagens Nyheter by Isabella Lövin, Minister for Development Cooperation and Climate. Published in Dagens Nyheter 25 April 2017: www.dn.se/debatt/repliker/vi-tar-fram-ny-bistandsstrategi-for-somalia

9. Somali-Swedish Action Group for Health Research and Development. Rebuilding research capacity in fragile states: the case of a Somali-Swedish global health initiative. Glob Health Action, 2017; 10:1;1348693. https://doi.org/10.1080/16549716.2017.1348693

10. Somali-Swedish Collaboration in Research for Health. The Midterm Seminar. Report compiled by Carina Källestål, Khalif Bile Mohamud and Klas Göran Sahlen, Hargeisa, October 2017

11. Somali-Swedish Research Collaboration for Health. Health Research Performance Evaluation. Seminar Report: A Powerful Tool for Strengthening Fragile Health Systems. Report compiled by Khalif Bile Mohamud from the final seminar of the research training course in Hargeisa, June 2018.

12. Health Research Devlopment Planning Workshop for Strengthening the Fragile Somali Health System, Umeå 31 October – 1 November, 2018. Report compiled by Khalif Bile Mohamud