

Strategic Localizing of Human and Material Resources for Recovery in Gaza Strip
National Research Center-Gaza (NRCG) and Middle East MAMASnet: Inter-Linked Projects:
Powering & Empowering Maternal-Newborn Healthcare in Gaza & West Bank

MAMAS: Mobile Assessment & Maternal Aid Solutions
MAMAS CHAMP: Community Health & Mobile Power

Dr. Fouad M. El-Harazin, National Research Center-Gaza (NRCG)

March 3, 2010

Ladies and Gentlemen:

It is an honor and a great pleasure for me to be here today in Cyprus. It is also with renewed hope that I have been able to come from Gaza Strip through Rafah Crossing to be with you all. I am eager to share a commitment for peace, health and local innovation in the Middle East with my new Engineers Without Borders colleagues.

I want to extend my appreciation to the conference meeting patrons and organizers; with special thanks to Dr. Bernard Amadei whose vision has inspired many of us in our different local, national, international spheres of expertise and influence. I bring you greetings from Ms. Linda Hawkin Israel, founder of MAMASnet and close collaborator with me and with others in Gaza toward integration of new technologies and an approach which we think will address the gaps in maternal and newborn healthcare delivery, especially in lowest resource camps. We believe that support of mothers and localizing resources to this end offers a thread of potential cooperation across sensitive borders in the sub-region.

A little about myself and the National Research Center-Gaza: I am an American citizen born in Gaza. My children were raised in America and live and work there now. I also have family members living in Gaza. I have spent most of my professional life in America working as a physicist. I have a doctorate in physics and after many years of working in the US I have retired and returned to Gaza to live with and help the citizens of Gaza recover from the many hardships they have experienced and continue to suffer.

I am meeting with US and EU-based INGOs, and cooperating with Ms. Linda and her US-based network to expand Gaza's historically-established but under-funded National Research Center-Gaza (NRCG) to design and develop a remote support system for use of integrated tools to plan, monitor and evaluate pilot sustainable health systems—(conceived in context of UN Health Cluster) and with initial focus on strengthening human capacity for maternal-newborn healthcare delivery in Gaza Strip as an example of increased capacity in a fragile and fragmented environment.

The National Research Center-Gaza (NRCG) is a quazi-governmental organization incorporated in Palestine; it is a non profit research institution, independent, apolitical, non-partisan and non sectarian, with focus on finding effective solutions to address the challenges facing the Palestinian public and private sectors

A little about MAMASnet: MAMASnet is a response to previous research (Averting Maternal Death and Disability AMDD) by Columbia University which is now foundational to World Health Organization and all international efforts which address maternal and newborn mortality. The AMDD “three delay” framework outlined the following:
1) women don't know they're in trouble; 2) they know but can't get to help; 3) they get to help and there's nothing there to meet their needs. Over the years Linda Hawkin Israel, a midwife and technology innovator, has led the MAMAS team to work with and document the voices of women in conflict and crises zones around the world in regard to their lack of access to maternal healthcare. She has explored the many stories which are represented in this AMDD framework and has conceived of a systems approach to reduce or eliminate the three delays that kill pregnant women and newborns.

Together we are now formalizing relationships with US and Middle Eastern universities, US technology industry partners and with relevant non-governmental organizations. We will develop a regionalized network utilizing adapted cellphones

and virtual reality training systems which can be localized, for applied research, monitoring, and evaluation. We are proposing to anchor this project in Jordan at RSS, and in Gaza at an expanded National Research Center-Gaza (NRCG) in cooperation with Battelle Pacific Northwest National Labs Center for Global Security. Tracks include:

-Telemedicine:

The pilot program, Middle East MAMASnet, addresses the gaps created by isolation of professionals and community-based healthworkers in Gaza Strip. We have identified a “systems” approach-- localizing and strengthening continuing medical education for midwifery and emergency obstetrical response through expanded e-Learning networks (videoconferencing, adapted cellphones). This will include virtual reality technologies supporting simulated (medical, surgical, logistical) trainings and the design of feature cellphones with pre-recorded tutorials and dispatch for midwives.

-Decentralized Power Generation:

This MAMASnet communication network is being designed separately but in synergy with “MAMAS CHAMP” (Community Health and Mobile Power) units for mobile gasification of waste to cheaply produce power and clean water as foundational for predictable electricity and water to meet health facilities’ needs. We are using the USAID framework “Powering Health” to design a sequenced system which measures kW needs of healthcare facilities, and IT system to track these requirements and RFID technologies to track supply chain to meet these consumption requirements

-Summary:

I am here because I believe that Engineers Without Borders can help build local capacity for alternative energies; that there may be interest in helping tailor, construct and install these newly developed, relatively inexpensive devices we call "CHAMP" for "Community Health and Mobile Power" for "green" electricity and clean water to local clinics that are off grid. We will propose that other, complementary technologies be reviewed in regard to each testbed needs.

We are prepared to cooperate with EWB in development of funding proposals with leadership by Battelle Pacific Northwest National Lab. The Seattle team is eager to meet with Dr. Bernard regarding the University of Colorado involvement following this conference and remotely with EWB Middle East members in regard to their regional interest.

As the world is becoming a "small village," technology has become a basic part of our lives. Yet these technologies are only the means, the driving force for peace and development is with people and the sacrifices we must make, even with joy in the effort. As a citizen of Gaza, I see clearly the results of how Palestinian and Israeli leaders have driven away from the visions of those who would seek peace. More and more of us have decided to expand our identification to include our neighbors and the rest of the world- not to preoccupy ourselves with enemies, rejecting violence, and to work with unprecedented creativity to lead our peoples beyond war and to localize our resources.

Speaking for Linda Hawkin Israel, it is her greatest dream that this narrow focus on maternal and newborn healthcare could provide a practical theme for cooperation with Israel, Jordan and Egypt, especially on design and deployment of emergency obstetrical response training and service support units from both Erez and Rafah border crossings. We are excited with our current progress and invite EWB to participate from your various countries, communities, universities. I am eager to discuss all, to provide materials and to answer questions you might have.

Dr. Fouad M. EL-Harazin

Director
National Research Center-Gaza (NRCG)
P. O. Box: 5340
Tel/Fax: +970 8 282-4157
Mobile: +970 59 933 4413
Gaza Strip - Palestinian Authority
[Email:alaqsau@hotmail.com](mailto:alaqsau@hotmail.com)



