



THE
ROCKEFELLER
FOUNDATION

ONE AFRICA ROUND TABLE II REPORT

Future of Water and Cities in North Africa

A Futures Literacy Knowledge Laboratory



Rabat, Morocco

December 4th-5th, 2015

Table of Contents

Introduction..... 3

One Africa Future Round II: December 4th &5th, 2015 5

Day 1 - December, 4th 2015: Future of Water Management and Slums in NA..... 6

Session 1: Introduction and Overview 6

**Session 2: Futures Literacy Exercise 1: Future of Water Security and Slums
in North Africa 13**

**Session 3: Futures Literacy Exercise 2: Future of Water Security and Slums
in NA..... 20**

Day 2 – December, 5th 2015: Future of Water and Cities in North Africa 22

Session 4: Scenarios of Water Security and Slum Renewal in NA 22

Session 5: Futures Literacy Exercise 3: Using the Future 24

Session 6: Future Scenarios and Windows of Cooperation with SSA 26

Annex 1: Roundtable II Agenda..... 31

Annex 2: List of Roundtable Participants..... 36

Introduction

The Future Studies Forum for African and the Middle East (**FSF**), a non-profit organization aiming at bridging MENA region with Sub Saharan Africa. Through conducting future studies, sharing knowledge and exchange of experience in relation to all aspects of development.

To fulfill the above mission, **FSF** focuses its research and networking efforts on North Africa as the conjunction region between Sub Saharan Africa and the Middle East.

Hence, Rockefeller Foundation is currently supporting FSF to produce 4 quarterly bulletins scanning future trends in North African, as well as conducting two meetings titled “One Africa” to exchange knowledge and experience.

See: <http://www.foresightfordevelopment.org/fsf/#fsf-newsletters>

At the start of FSF’s activities, it was projected to conduct scanning activities in North Africa and to bridge NA with Sub Saharan Africa through holding expert meetings and affiliating knowledge exchange. **As FSF activities progressed**, it was clear that its vision fulfills a **huge need in the region**.

FSF is not only attempting to bridge NA and SSA, **it is in fact bridging the two sides of MENA**, which are not connected as a result of colonization and geography.

Moreover, it was evident during the first One Africa meeting, and the subsequent feedback related to the three bulletins produced; **that FSF’s approach is not only innovative and novel, but very much needed and relevant**. “The African growth story has largely been missed by most non-African Middle East states, and by a Middle East media focused more on the multiple crises in the region, U.S. foreign policy and the Iran nuclear talks.” But more initiatives are coming from Arab countries i.e. UAE and Morocco to increase the level of cooperation with the content.¹

As such FSF’s initiative can achieve the following **outcomes**:

- 1- **Mainstream Futures studies and its methodologies in MENA** as a tool for planning and policy making.
- 2- **Establish a platform for disseminating futures studies research and tools produced in Africa and MENA to Arabic speaking populations**. Through direct collaboration with African partners supported by Rockefeller Foundation.
- 3- **Develop systematic knowledge and learning exchange between Africa and MENA** on future studies sustainable development and innovation.

¹ <http://english.alarabiya.net/en/views/news/middle-east/2015/06/21/The-Arab-world-and-the-future-of-Africa.html>

The Futures Studies Forum for Africa and the Middle East (FSF) held its first “**One Africa Future Round Table**” in Amman, Jordan; on **May 16th and 17th, 2015**. The meeting aimed **to facilitate knowledge and experience sharing between experts and futurists from MENA and Sub Saharan Africa (SSA)**. The two days meeting discussed the cooperation areas between the two regions and suggested future collaborations between FSF and its counterparts in the region and Africa.

The first meeting is part of the activities initiated by FSF to scan trends in North Africa that are having profound impact on the developmental issues in the region. Through producing monitoring bulletins (**North Africa Horizons**) and holding round table meetings.

One Africa Future Round table also reviewed the two monitoring bulletins produced by FSF titled: **Securing Wheat Availability: What Prospects for North Africa**” and the “**Future of Millennials in North Africa**”. In addition, it discussed the state and role of futures studies in transforming Africa’s future and how innovation can be a catalyst of change in both regions. It was attended by 19 futurists, heads of futures center and researchers and UNESCO Paris. Participants represented 10 countries. Namely: Ghana, Kenya, South Africa, Libya, Sudan, France, Canada, Egypt, Tunisia, Morocco and the FSF host country: Jordan.

One Africa Future Round II: December 4th & 5th, 2015

The second “**One Africa Future Round Table**” took place in Rabat, Morocco on December 4th & 5th, 2015.

The Rabat meeting was organized jointly by the Futures Studies Forum for Africa and the Middle East (FSF), the Royal Institute for Strategic Studies (**IRES**) in cooperation with the Foresight Unit at **UNESCO**. As part of the activities initiated by FSF to develop foresight capacities, scan trends in North Africa, through producing monitoring bulletins (**North Africa Horizons**), and holding round table meetings, all with the support of Rockefeller Foundation.

This is the second meeting in a series titled One Africa Future Round Table.

Futurists and experts from Morocco, Egypt, Senegal, Cote d'Ivoire, Cape Verde, Mali, Sudan, Tunisia, Ghana, South Africa, Canada, the UAE and Jordan have attended the meeting.

The recommendations of both meetings will enable the Futures Studies Forum for Africa and the Middle East (FSF) to discuss the issues raised by its quarterly bulletins, as well as to define its future mid-term strategy and activities in SSA and MENA.

Day 1 - December, 4th 2015: Future of Water Management and Slums in NA

Session 1

Introduction and Overview

The first session of day one was divided into 3 main parts: a welcome note by Dr. **Tawfik Mouline**, Director General of the Royal Institute of Strategic Studies (**IRES**), an introduction of the meeting's objectives by Dr. **Nisreen Lahham**, Head of Director's Board at the Future Studies Forum (**FSF**) and Dr. Riel Miller, who briefly presented the concept of the Futures Literacy Know-Lab to be utilized in the upcoming sessions.

The second part of the session was moderated by **Koffie M. Kouakou** who commenced with an ice-breaking exercise, where all participants were asked to introduce themselves in 30 seconds. To be followed by the presentations. The first presentation involved the outcomes of the third FSF newsletter titled "**Managing Water Scarcity in NA**" and the fourth FSF newsletter titled: "**Future of North Africa's Slums**" by FSF's Senior Researcher Ms. Reham Youssef. Inputs by key experts input were provided by Dr. **Dia El Din EL Quosy**, Dr. **Julius Gatune Kariuki**, Dr. **Khalid AbdelHalim** and Dr. **Geci Karuri Sebina**.

Key ideas presented at the first session are summarized below:

- **Welcome Note**
Dr. Tawfik Mouline, Director General, Royal Institute of Strategic Studies (IRES)
 - Dr. Mouline started his speech by welcoming the workshop attendees in Morocco.
 - He introduced IRES role in the field of foresight activities in Morocco, highlighting the dependence of prospective analysis on data banks (the importance of qualitative and quantitative information). He stressed the necessity of having an advanced monitoring system to detect the seeds of change, and which should have a national, an international and a global dimension to it.
 - Dr. Tawfik introduced the topics to be discussed during the workshop, namely the **future of water management and informal areas (slums)**. He started out by describing the water vulnerability situation in Africa, where 22 of the most water vulnerable countries in the world are. In Morocco, there is an increase in demand for water accompanied by an extensive use of aquifers during drought cycles. He stressed that the water issue needs to be at the heart of public policy, with other policies being built it. He then referred to the need to revisit water issues to take into consideration water use in agriculture, an issue that Morocco attempted in its **Green Morocco Plan**.

- AS for the future of urban development, Dr. Mouline described the current sweeping urbanization phenomena, and concerns on **the multidimensional urban approach**. He insisted that the current urbanization wave calls for extensive infrastructure and poses challenges for human development. As a result, development needs to adopt an integrated approach, involving a reduction in social inequalities. Moreover, Article 31 of the 2011 constitution confirms the right to a healthy environment. For the first time in its history, Morocco has realized the importance of urban planning and which was reflected in the Ministry of Housing, Spatial Policy and Urban Planning.

- **Introduction of Meeting Objectives and Process**

Dr. Nisreen Lahham, Head of board of directors, Future Studies Forum (FSF).

In her opening speech, Dr. Lahham briefly introduced the meeting objectives.

- She thanked participant's international, regional and local participants attending the meeting in Morocco, and thanked Dr. Mouline and IRES for their kind hospitality and their cooperation.
- She stated the mission of the Future Studies Forum for Middle East and North Africa (FSF); which is funded by the Rockefeller foundation and its scope of work. She stressed the importance of monitoring emerging trends, which is a key task of FSF and the main objective of the meeting. The systematic monitoring of such trends is expected to contribute to futures studies in SSA and MENA and to raise awareness regarding the need for such studies.
- Dr. Lahham, introduced participants to the meeting agenda, briefly overviewed the importance of future trends related to both water and urban slums in Africa, while introducing the agenda for the upcoming 2 days.
- She concluded with the need for synergizing efforts from both NA and SSA to build the desired future for the African continent, highlighting the role of this workshop in attempting to achieve this achieving this goal.

- **Presentation of the Futures Literacy Know-Lab Concept**

Dr. Riel Miller, Foresight Unit, UNESCO, France.

- Dr. Riel Miller commenced his introductory speech with the limitations and challenges facing the traditional thinking about the future. He stated that "**today, in the face of challenges there is a recognition of the need to find ways of being innovative and respectful of reality at a local, community-based level. There is a need to understand where the people want to go; their version of hope.**"
- He then linked this reality to the objective of the workshop, and the responsibility of collective interest that empowers a more bottom-up approach. He assured participants that "this workshop does not provide a miracle cure but instead builds on the previous meeting that took place in Jordan in May 2015." "It is a demonstration of key tools and techniques that we need to acquire to address issues in a more bottom-up approach to looking at our future."
- Dr. Miller then briefly introduced the concept of a Futures Literacy Laboratory, which is to be used during the upcoming sessions of the workshop. He

explained that **“the laboratory - in an experimental context - creates an opportunity to construct different images of the future.”** A project that has been initiated by UNESCO to experiment with prototypes, with the aim of bringing these prototypes to Africa. The futures literacy laboratory is a learning by doing concept that creates the capacity to use the future in a way that is more empowering.

- **Ice-Breaking: Exercise 1**

Koffie M. Kaoukaou talked about the significance of the **of December for NA region and the Arab World, where the 17th of December 2010, marked the death of a poor Tunisian man - Mohamed Bouazizi-who burned himself alive, and sparked the Arab Spring revolutions. This incident has changed the face of the Arab World and will impact its future.** Participants stood for 17 seconds in respect for **Mohamed Bouazizi** memory, and then were asked to quickly introduce themselves in an ice-breaking exercise, then were introduced to the presenters of the session. In the second session, both newsletter 3 and 4 of FSF will be presented, and each newsletter will be discussed by experts on the topic from North Africa and Sub-Saharan Africa (SSA).

Dr. Miller stressed that the session is part of a bigger design of a common intelligence exercise, which instills the common base for ideas needed for discussions (a common point of departure) that are part of the futures literacy laboratory methodology

- **Outcomes of Newsletter 3: Managing Water Scarcity in North Africa**
Reham Youssef, Senior Researcher, FSF

- Ms. Youssef presented the main findings and ideas regarding the future of water scarcity management in North African countries.
- The presentation started with an introduction to the current status of water resources in North Africa vis-a-vis the world, with an overview of some of the indicators of dwindling water resources in the region (falling water per capita, water poverty). The main water security challenges regarding both water supply and water demand in the region were presented, water supply challenges being: deteriorating water quality, climate change and decreasing precipitation, trans-boundary waters. On the demand side, the main challenges involved growing populations, increase in agricultural needs, and the impacts of urbanization on increasing urban center's needs. The newsletter's main focus was on demand management given that securing water supply is reaching its physical and financial limits. Hence, the need for reform at the local level.
- Key emerging trends in water management according to the newsletter included: scaling up education for water reform, increasing the role of private financing (i.e. Morocco), increasing public education and community involvement (i.e. Tunisia), and the increase in regional cooperation in developing irrigation methods. Hence, prospects for the future of water management will require an understanding that reform decisions are inherently political in nature, that non-water policies are central to water reform attempts, and the need for instituting public accountability mechanisms.

- Water pricing was another future trend depicted in the presentation as a potential "demand control" tool, with emerging signs of embracing this concept in Morocco and Tunisia. The main prospects involved here are mainly public opposition concerns, lack of genuine political will, water tradability issues with countries like Israel, and the dilemma of valuing water resources or achieving food self sufficiency.
- A final prospect presented involved trends regarding management of irrigation water, as a heavily subsidized input in agriculture with consumption rates of near 80% in all NA countries. Here, the concepts of virtual water trade and impact of technological innovations on this sector were discussed.
- **Challenges and Opportunities of Water Security in NA**
Dr. Diao el Quosi, Egypt -Expert
 - Following up on the presentation of FSF's third newsletter, Dr. Diao El Quosi , began his presentation introducing the changes that have occurred in water resources in NA, where they have decreased from an average of 3430m³/year in 1960 to 950 m³/year in 2000 and are expected to further decrease to 667m³/year in 2025. He provided an overview of the small precipitation rates in the region, and the main groundwater aquifers available which are fossil non-renewable resources.
 - He then moved onto the main challenges expected to impact water security in NA in the future. The main challenges discussed were summarized into: the high population growth rates in NA (with an average of 1.8 - 3%), high population densities, increasing internal competition for water resources (between stakeholders), as well as increasing external competition for water among different countries, in addition to engrained values that impact management, imposition of pricing, and water subsidies. Other challenges included the lack of a participatory approach in dealing with water issues, rigid institutional settings, and rapid urbanization rates.
 - In a presentation of the main opportunities facing water security, Dr. El Quosi chose to use the phrase "Cash Per Splash" to refer to opportunities. The main opportunities pertaining to NA according to the presentation included: the prime location of NA, its favorable climatic conditions, availability of skilled labor, the prominence of young nations and the strong power they represent, the abundance of brackish groundwater aquifers, and the availability of diverse renewable energy resources. In addition, NA countries have very good desalination potentials, spacious deserts, high potential for rain harvesting, and potential for training and capacity building. The impact of climate change yet remains to be seen.
 - In conclusion Dr. Diao asserted that "when people feel water scarcity....that in itself is an achievement".
- **Innovation in Managing Water Resources in NA**
Dr. Julius Gatune, African Center for Economic Transformation (ACET), Ghana

- In an attempt to bring in the experience of SSA in water resources management to NA, Dr. Julius Gatune Kariuki gave an overview of main challenges facing SSA. Not only there is a low access to water resources especially in rural areas, but also a very low utilization of available resources in most SSA countries. Where only 4% of available fresh water is exploited; and despite high hydrological variabilities, water infrastructure is very poor, with storage per capita reaching 200 m³/year in SSA compared to 3500 in the EU and 6000 in the US. **Hence, the main challenge in SSA is that of exploitation rather than a scarcity of resources, not only due to the lack of financial resources, but also the lack of imagination on how to exploit the abundant transboundary rivers. Ethiopia is showing signs of new ways of exploiting its water using internal funds.**
 - Dr. Gatune then went on to describe water innovations in SSA, from simple farmer designed innovations to more sophisticated engineering solutions such as: the **Warka Water Tower**. Some of the leading new approaches to innovation include "innovation challenges" such as the **Standard Bank Idea Scale Challenge, which uses crowdsourcing to contract people to suggest ideas relating to groundwater, sanitation, purification, solar applications.**
 - The presentation also highlighted that real transformation will come from policy innovations, and there has been some progress on that front in SSA, where some countries have been able to move from decentralizing their water frameworks to working on making markets work better. There is a realization of the need for cost recovery with the main challenge being deciding on the price.
 - In conclusion, Dr. Julius pointed out the prospects of the future based on SSA experience, which mandates the adoption of a three pronged approach, with innovations in supply augmentation, demand management, and efficiency. Key enablers for a better future include a well functioning water policy innovation system, bold thinking that puts economic transformation first with water following. **The biggest challenge expected to face the future of water innovations in SSA is political economy, where politicians want it to be subject to political agendas , while civil society views it as a human right.**
- **Overview of Newsletter 4: Future of North Africa's Slums**
Reham Yousef, Senior Researcher, FSF
 - In her presentation of FSF's fourth newsletter, Ms. Youssef introduced the general image of slums in NA, while shedding the light on their legal status, their "messy" economic activities, and the different models employed to upgrade and integrate them in the formal fabric of NA cities.
 - The impact of urbanization on the growth of slums in NA was discussed, and the different dimensions of the slum "challenge" were examined. The increase in slums in NA can be attributed to a lack of affordable housing just as it is due to poor policies and good governance of the phenomenon. The trend of a rise in "gated communities" in many NA cities was also considered. Future prospects of slums in NA mainly involved how NA governments will react following the Arab spring events, will it represent a wakeup call that will result in working with slums differently, or will the "old order" reign? The concern regarding the political

manipulation of slum dwellers in the future was also raised, especially in light of what happened during Algeria's 2014 presidential elections. The emergence of creative thinking in addressing challenges was observed in many NA countries.

- The presentation focused on the economic perspective of slums in NA, where slum dwellers in these countries are engaged in informal economies and composed of economic clusters specialized in certain economic activities. Livelihoods provided within slums pulls dwellers to remain in them, even though economic opportunities in slums are constrained by many barriers. The model of how slums can be transformed into contributors to urban development in the future was also discussed. The newsletter argued that slums should be viewed as opportunities and not opportunity costs, and hence today's slum dwellers are actually tomorrow's winners. The problems underlying urban poverty need to be addressed and slum dweller connectivity needs to be enhanced. The way forward mandates giving women visibility and voice, linking development plans to the needs of slum areas, and viewing dwellers as active agents of change in policy formulation.
 - In an attempt to look into the social dimension of slums, NA slums are characterized by being unsafe and crowded in nature, with constant threats of gentrification and biased government evacuation plans. Dwellers in NA slums are known to suffer from "low life chances" with multitude of risks including exploitative informal jobs, lack of social security, child exploitation, lack of access to finance, and others. Despite this negative image, the future holds positive prospects. There are emerging examples in NA slums of initiatives that empower girls and children, as seeds for the future.
- **Challenges and Opportunities of Upgrading Slums in NA**
Dr. Khalid AbdelHalim, American University of Cairo.
 - **Dr. AbdelHalim**, started his presentation with four main propositions on **how to deal with the future of urban slums: an understanding of the phenomena of slums, the peculiarity of conditions in slum areas, government response to slum issues (public policy) and learning from practice (good and bad experiences)**.
 - He also set out a general framework to use when looking into the future of urban slums in NA. "First, there is a common misconception that slums are a physical development when in reality they are mainly about marginalization and social exclusion." He also highlighted the importance of looking into how "formal" the "informal" city really is, and "to understand that there are good things as well as bad things happening in slums, and hence there is a need to unfold the phenomenon." Second, it would be wrong to look only at urban policies because a wide spectrum of government policies affects slums. "Here we need to ask ourselves: do government policies genuinely consider social justice at their core? Or is it a process of empowering the prestigious elite to benefit from valuable land?" Third, there is a need to deal with the social and economic perspectives of urban slums and to tap into their potential, in a shift to a more enabling approach.

- **Dr. AbdelHalim** concluded his presentation with citing the main challenges and opportunities that will help in shaping the future of urban slums. The challenges facing slums include: Firstly, a deteriorating economic situation in countries that have underwent and didn't undergo revolutions and its effect on political stability will impact slum upgrading efforts. A good example is the case of Egypt, where national resources were channeled into flagship projects at the expense of national priorities such as dealing with urban slums. Secondly, despite the revolution political reforms have been superficial and the exiting bureaucracy was perpetuated. Thirdly, the same approach to dealing with slums remains loyal to the perception of sanitizing cities from slums using the same traditional technocratic approach.
 - As for the opportunities, **Dr. AbdelHalim believes that the best approach would be to transform the challenges to opportunities, probably by resorting to pressures from international institutions to implement city-wide and participatory programs.** He also stressed the need to capture the opportunities and dynamics of urban slums and to capitalize on their social assets.
 - Finally, Dr. Khalid left the attendees with a few questions to help them think of the future of urban slums: What could be done to improve the image of slums? What could be the alternative image?
- **Urban Development and Informal Growth in SSA: Policies and Trends**
Dr.Geci Karuri Sebina, South African Cities Networks
 - Dr. Karuri Sabina started her presentation with statistics on slum populations in urban Africa, showing the prevalence of slums in SSA countries. She described the emergence of slums in the context of "paradoxes to development" where they are seen by cities as engines of growth, at the same time there is a push against what is urban, and how the "anti-city" movement in SSA countered to wanting to address the issue of rural underdevelopment. She argued that as African wealth rises, luxury goods makers may target openings beyond Morocco and South Africa, which account for 86% of Africa's directly-operated luxury stores. In a sign of booming high-end wealth, the private jet route from Lagos to London was the eighth-fastest growing in 2013, according to NetJets. Moreover, Knight Frank Research estimates that Africa's ultra-high-net-worth individuals may expand 59% from 1,900 by 2024, the most of all regions globally. Ivory Coast tops the regional list, with 119% growth in the richest population predicted by 2024. As the world hunts for opportunities, global analysts continue to try to identify countries that offer great growth potential - that are seen to be on their way to prosperity and offer investors the possibility of top-notch returns. "So we hear now not just about the BRICS, but also the *Mints* (Mexico, Indonesia, Nigeria, and Turkey) and the *Kings* (Kenya, Ivory Coast, Nigeria and Ghana) – But what does this potential – or even actualizing it - mean for the many, the millions, our brother and sisters whose lives continue largely not to change. What kind of prosperity can *they* hope for?"
 - **Dr. Karuri Sabina** discussed further the politics of "informal" settlements. Where most informal settlements in SSA suffer from lack of access to improved

water, improved sanitation, sufficient living area, overcrowding, structural quality/durability of dwellings, security of tenure as well as illegality risks. This mandates in situ upgrading, back yarding, and land tenure reform. She stressed the importance of finding a new attitude to the life-work conditions of the urban poor majority, one based on social legitimacy and not some form of idealized urban normality drawn from other places and other times.

- She portrayed the so called "Urban Fantasies" of African governments, and showed the huge difference between plans put in place, and realities. Thus, stressing the need for a transformative agenda. **"The way forward will not be realized unless the attempts to 'plan' the city "understands the *realpolitik*² of the political economy and emerging hybrid socio-cultural attitudes to urban land, and not necessarily attempt to implant some form of 'rational planned order'".** The development agenda has to be transformative for the majority, and in this respect 4 key dimensions for change can be identified: re-configuring power imbalances, re-structuring space (increased efficiency, spatial justice and equity), transforming institutions (Poli's *Auftragstaktik*³), and building organisational and managerial capability.
- Dr. Karuri Sabina closed her presentation with a quote from Achebe's "Anthills of the Savannah": **"While we do our good works let us not forget that the real solution lies in a world in which charity will have become unnecessary".**

Session 2

Futures Literacy Exercise 1: Future of Water Security and Slums in North Africa

The second session of the day was divided into 4 main parts. This session represented the beginning of level 1 of the futures literacy exercise initiated by Dr. Miller to guide the participants throughout the next two days.

- **Introduction of Next Steps and Group Divisions**
Dr. Riel Miller, Foresight Unit, UNESCO, France

Dr. Miller started with a quick presentation of what was required to conduct the exercise and the next steps to be taken during the workshop.

According to Dr. Miller, **Futures Literacy (FL)** is the capacity to tell anticipatory stories using rigorous imagining based on sharing in depth knowledge from across the community. **FL is a way of internalizing the constant development of our**

² *Realpolitik* (from German: *real* "realistic", "practical", or "actual"; and *Politik* "politics") is politics or diplomacy based primarily on considerations of given circumstances and factors, rather than explicit ideological notions or moral or ethical premises.

³ The concept of *Auftragstaktik* (or "mission-oriented tactics" forms the basis of the German military doctrine. The main idea of *Auftragstaktik* is that "commanders should give subordinates general directions of *what* was to be done, allowing them freedom to determine *how* to do it".

understanding of the potential of the present and of changing anticipatory assumptions.

The Three basic building blocks of anticipation are composed of:

1. **Anticipatory systems perspective that encompasses both animate and inanimate anticipation – distinguish different models.**
2. **Three distinct dimensions for imagining the future and the different methods that are related to each: contingent, optimized, novel.**
3. **Futures literacy knowledge labs: A learning-by-doing process that uses collective intelligence to discover and invent specific knowledge – action research processes for discovering, reframing and questioning anticipatory assumptions.**

The purpose of this part of the exercise was to simply breakout group discussions on the two topics discussed earlier: **Water Resources Management in NA, and Urban informal settlements, where participants will contemplate the probabilities and hopes related to each topic.**

Participants were divided into 4 main groups, with a facilitator to moderate each group. Divisions were mainly based on common languages given the diversity of backgrounds and languages of participants, as indicated in Table 1.

Table 1: Group Divisions

Group 1 Members	Group 3 Members
<ul style="list-style-type: none"> • Julius Gatune Kariuki (facilitator) • Khaled AbdelHalim • Abbas Younas • Maleeka • Reham Youssef 	<ul style="list-style-type: none"> • Dr. Kais Hammami (facilitator) • Hammou • Tawfik Mouline • AbdelAziz Adidi • Gambleu Kouadi • Taoufik Boudchich
Group 2 Members	Group 4 Members
<ul style="list-style-type: none"> • Geci Karuri Sebina (facilitator) • Nisreen Lahham • Lamia Raei • Mohammad El Halaiqah • Daa El Quosy • Hussein Abaza 	<ul style="list-style-type: none"> • Koffie M. Kouakou (facilitator) • Sandra Coulibaly Leroy • Ibrahim (UNESCO) • Olugbinga Adesisa • Cheikh Si K M Baye

- **Level 1 Futures Literacy Exercise: Expectations and Normative Visions (Group Work)**

All 4 groups convened in separate meeting rooms for 40 minutes to work on expectations for water and informal settlements for 30 minutes, followed by working on hopes for those two issues for 2045: **What would you consider to be a desirable state for water and cities in 2045? The first part of expectations is meant to be**

realistic, while the second part about hopes should rely more strongly on imagination.

Group members were provided with sticky notes on which they should jot down their main ideas, as well as white paper boards to arrange these ideas and group them according to issue.

- **Discussion of Anticipatory Assumptions**

Members of each group were then asked to present their results. During presentations, Dr. Miller invited participants to be open and trusting, because the purpose is to provide an open space to express fears and hopes and expectations, as an important phase of a learning process. The purpose of this level is just to set a descriptive framework that will be reframed in a following part of the exercise.

Samples of the main results of the four groups are summarized in table 2 for Water and table 3 for Informal Settlements

Table 2: Sample Results for Group Work on WATER

Expectations	Hopes
Group 1	
<ul style="list-style-type: none"> • Extensive desalination • Drought will increase and will result in disturbing demographics and causing conflicts • Transporting water from water rich areas to water poor areas • Reduction in consumption • Technological advancement and large scale renewable energy will be used • Transport movements of water or for water (from rich water areas to poor water areas) • Post World War I&2 states boundaries will change • Global warming might lead to migrations • Water will not be a public good, and Egypt will probably buy its water in the future 	<ul style="list-style-type: none"> • Water secure NA countries with new technologies in water use • NA exporter of knowledge to the rest of the world • Better water governance • Efficiency in water use • Desalinated water use
Group 2	
<ul style="list-style-type: none"> • Emergence of environmentally friendly behavior • Interregional African cooperation and sharing of trans-border resources • Impact on water intensive crops and its relation to food security 	<ul style="list-style-type: none"> • Technological progress to address water issues • Increased awareness among citizens of rational water use • A Green Revolution in Africa

Expectations	Hopes
<ul style="list-style-type: none"> • European and Chinese models for Imposing water fees 	<ul style="list-style-type: none"> • Sharing water resources among different countries • Setting up a global structure for free of charge access to water – Charter • Sustainable cities • Water pricing policies to ensure rational water use
Group 3	
<ul style="list-style-type: none"> • Migration from water scarce areas to water rich areas • Conflicts among countries and disputes among local communities • New ways to capture more water 	<ul style="list-style-type: none"> • Reusing waste water and its use in agriculture • Improving the supply side

Table 3: Sample Results for Group Work on INFORMAL SETTLEMENTS

Expectations	Hopes
Group 1	
<ul style="list-style-type: none"> • Loss of green areas and forests • Growth of densely populated areas and urbanization • Spatial change • Huge horizontal expansions • No slums in NA • Private sector will lead housing market • Population shifts and increase in immigration from NA to Europe. 	<ul style="list-style-type: none"> • End of terrorism • Higher levels of women participation and empowerment. • More democracy and freedoms • Better education and more sophisticated communities • More than one superpower in the world or no super powers at all • No slums in NA • Arab countries will have open boundaries with no restriction on movements • Development of cities transforming informal settlements to become productive segments of society
Group 2	
<ul style="list-style-type: none"> • Emergence of major cities • Slums will become more resilient • Climate refugees and their integration in public policies • Green cities • Slums would become autonomous and incontrollable by authorities 	<ul style="list-style-type: none"> • No major cities • Devolution of powers in cities • End of macro civilization of management of large cities
• Group 1 presented by Malika Bouzaine/ Dr. Khaled AbdelHalim	
<ul style="list-style-type: none"> • More slums • Smarter slums – slum dwellers will be able to employ technologies to better organize themselves making them more autonomous • Pseudo integration by governments into the formal urban master planning • More people will be recruited by extremists 	<ul style="list-style-type: none"> • Poor people in society to live in humble dignified places • A move from opportunity cost to opportunities • Better designs for alternatives to slums

Group 3	
<ul style="list-style-type: none"> • Decentralization • Migration will continue • Technical progress will • Better articulation between city and countryside • Emergence of middle class • Achievement of SDGs • Transition to the digital era • Reinventions 	<ul style="list-style-type: none"> • More smart cities • Creative governance • Reversed migration flows and circular flows • New trajectories and paths

At the end of the presentations participants provided their general comments and ideas on the results of the exercise:

- Dr. Riel Miller confirmed that it takes a huge effort to depart from conventional ways of thinking, and that there is need to provide an open space to express fears, hopes and expectations. It is an important phase of the learning process. The future is imaginary, and so the framework we are building now will be reframed in a later phase of the exercise.
- Dr. Khaled AbdelHalim posed a few questions to be discussed by Dr. Miller in a later phase:
 - Future rulers in 2045 are being born today.
 - We are overlooking the trend that has labeled this era as a knowledge generation, so what are the implications of that? Which trends are quicker to instigate radical change than others?

• **Presentation of the Learning Intensive Society (LIS) Model - A Reframing Model**

Dr. Riel Miller, moved to stage 2 of the Futures Literacy Knowledge Lab to reflect on the results of the first stage of the exercise. Some of the important concepts he highlighted to encourage participants are summarized below:

- Uncertainty is the origin of creativity in this universe
- The future is not about the future, the future is about the present. So scenarios can be used if you are playing chess, but in a complex world like the one we live in a different way of thinking about the future is needed.
- Diffusion of futures literacy in Africa through the UNESCO project which will see the light in 2016.
- Two powerful forces are changing how we perceive and take advantage of complexity, turning it from a threat into a resource. First, is the desire to enhance the capability to be free and second is the growing appreciation of complexity that includes the inherently unknowable. People are experimenting and researching ways to enlarge and deepen their understanding of reality. This is a basic advance in the reach and relevance of science.

He then affirmed that the Imagining “Africa’s Future: A UNESCO Priority Africa Project” aims to design and test innovative prototypes for developing Futures Literacy across Africa, generate research on the design and implementation of collective intelligence knowledge creation processes that use the future in Africa, enlarge and establish research centers and networks, achieve on the ground empowerment on specific challenges through FL Know Labs, and build Futures Literacy.

Dr. Miller emphasized that there is a need for a new way to think of the future differently, where he provided the participants with variables and tools to think of the future in an attempt to develop their futures literacy.

He then introduced the concept of the **Learning Intensive Society** on which level 2 of the exercise is based on. The most important ideas introduced:

- The Learning Intensive Society is not a predication or a preference, it is simply changing the assumptions we use to imagine the future. **A world where formal/informal has been transcended and the relationship to “resources” is endogenous to quality of life.**
- The point **is to build up a new set of anticipatory assumptions**, ones that can be used subsequently to examine current dominant anticipatory assumptions and then on the basis of the contrast pose some new questions about the present. **The aim is not to address the question of how to achieve an LIS future nor consider to what extent such a future is probable or desirable.**
- The unique creation economy, a “murmuration” – heterarchical and fluid characterized by continuous birth, death, entry and exit of value creating networks.
- Change as compositional – as new activities and ways of organizing life emerge the old ways change position in the overall weight of the total activities (time, resources) undertaken in a given society.
- The attributes of **identity creation are different, in the LIS identity emerges more consciously since there has been a change in the conditions of change – people have a greater capacity to recognize their socially constructed identity and to engage in its continuous internalization/externalization.**
- Decision making capacity – **the LIS is an “experimentalist”** society where **conducting experiments is a way of life and learning from both failure and success essential.** Administration is marginal and responsibility is taken where and when something happens.
- Transformation is multi-dimensional, occurring across inter-dependent systems.
- Imagine yourself as a designer of the future, why look at the first 10 thousand opportunities, why not look at the next ten thousand? There is an abundance of possibilities.
- Learning can become the main source for value creation.

Session 3

Futures Literacy Exercise 2: Future of Water Security and Slums in NA

- Reframing-Layered Analysis (Group Work) - 60 minutes

The third and final session of the day took the futures literacy exercise to its second level, where groups were asked to work on their layered analysis from the first level of the exercise and to discuss their assumptions at the end of the day.

The task in the second phase of the session was to “reframe” the organizational assumptions used to describe the imaginary future using a discontinuous model. The model is not based on either probabilistic or normative reasoning, although there are a set of narrative assumptions used to frame the analytical model. **The primary task in that session was to engage in “rigorous” imagining exercise** using the analytical model of the Learning Intensive Society. In this model major aspects of the image of the future are fundamentally different than in the present. “Again, the idea is to avoid discussing dynamics or how this happened.” **The goal is to describe in as much operational and “day-in-the-life” detail what it is like to live in this Learning Intensive Society of 2045.**

The task for the groups in a collective intelligence process is to analyze the rich picture of an operational working LIS using four layer analytical framework:

1. Headlines – what do people talk about at the café?
2. Systems – what are words for the economic or social system?
3. Point of view – how do different stakeholders describe the world around them?
4. Myth/Metaphor – what is the overarching nature/purpose/character of the society?

- Discussion of Level 2 Anticipatory Assumptions (30 min)

Some of the main points raised by participants as a feedback to the concept of the learning intensive society model and Dr. Riel Miller’s explanation included:

- Now with all the good intentions on climate change negotiations, we are heading into a crisis, and the goals are clearly not going to be realized. As humans we have always been reactive instead of proactive, so unless we change course we will head into a collision. We need to confront those opposing change, starting from international organizations to local leaders.

Dr. Riel advised that we actually need not to prepare. Up until now, the idea was to achieve an agenda or plan, and use that as a goal and try to implement it in one way or another. The ends today justify the needs. Can we invent a system where the means are the ends? And we are going to discover it as we move along without planning for it.

- How we think is a result of a socialization process, so how can we go beyond this and come out of the boxes we are used to think in? What is happening in the future

is an extrapolation of what has happened in the past, how can we leave this trending and think differently?

Dr. Riel affirmed that constructing the context is key, and there is a need to work very carefully with local champions. There is a need to reframe the way we use the future. “How to get better about inventing things on the menu instead of just using the menu”.

Day 2 – December, 5th 2015

Future of Water and Cities in North Africa

Session 4: Scenarios of Water Security and Slum Renewal in NA

- Scenarios Development (Group Work)

Dr. Riel Miller started the first group work exercise of the day, by asking groups to meet for 60 minutes to build models for the future, or sculptures, in an attempt to depart from existing assumptions through learning-by-doing, and think in a radically different way about the future. “This exercise represents an important step in capacity building in the futures literacy.”

- Presentation of Scenarios and Discussion

In the second part of session 4, groups returned to the meeting room to present their scenarios. Dr. Miller presented to participants a video showing a flock of hibernating birds that were formed in a beautiful structure. The purpose here was to show the resemblance between this group of birds moving in the same direction and a group of people that have come together to build on their collective intelligence. He drew a very interesting observation: there was no big bird that set the path for the murmuration, it exists without design. This is the example that he wanted the participants to follow in their group exercises.

As an emergent phenomenon it is an absolutely incredible reminder of the need to be humble in the richness of the world around us.

- **Sample Group 1 scenarios:**

The political/social framework will be that of a global nomadism in combination of local neighborhoods and communities, where the local identity is important but what will change is the primer marker of those identities: What is the most identity shaping factor? Is it Ethnic? Is it Geographical?

Glocalization will be dominant. With the disappearance of the Weberian state there will be more localized power leaders at the community level, leaders could have symbolic power due to knowledge or religion or any other factor but will differ from one community to the other. The leader will be close to the identity marker.

The economic framework will be one in which knowledge will be gained on a non-institutional basis (de-institutionalizing knowledge) with radical implications on all other economic and social systems. The economic system will no longer be based on demand and supply but a community DIY economic system, a model that will change production pattern formation.

This will reflect on food and water and dwellings.

Dwellings under this scenario will either be transient or temporal (possibility of moving homes around the globe, or moving to host homes) or to have printable biodegradable houses. The city will then evolve into "plug-in" city.

Coming to nutrition, there will be a major shift with regards to nutrition. We will either return to hunting food or taking food tablets/injections or any other mode.

- **Sample Group 2 scenarios:**

"Emergence of United States of Africa, leading to an African identity fostering autonomy and common policies. The Sahara perceived as an ocean will turn into a link between SSA and NA. Africans will set up a number of learning communities acting in a smart manner with an African agenda. Technology will be intensively used to get better command to water resources and agricultural development. This will promote agricultural value chains. We will be talking about cities and not slums.

Concepts involved: identity, a common Saharan space, a Pan African learning network through the use of technology,

The methodology we re-destructed and reconstructed in order to re-invent a methodology. We discussed water issues and city related phenomena, which are sectoral, but in thinking of global multi-dimensional solutions we adopted a more global perspective which is that of the United States of Africa project, which brings together the North and South of Africa.

Feedback was provided by Dr. Miller on the methodology, where there is a need to understand that aggregation and the idea of unity have been proved unattainable according to the theories of complexity. There is a need to deconstruct but reconstruct in a radically innovative way. Having confidence in science acknowledges a confidence in complexity, and an opportunity to question our basic ways of thinking. There is a need to think beyond the obvious, a need to provoke the way of making the future meaningful in a new paradigm.

- **Sample Group 3 scenarios:**

A vision for Africa in 2045 has two scenarios:

AfriMer(e) (AfriWater) where water shapes the future of Africa. The use of water will determine all activities, with optimal use of available technology. An African Water Council and engage in the reflection on water resources with the sea as a central element.

In the second scenario AfriTerra (AfriLand), the society will be the opposite of that of AfriMer, with a maximum exploitation of land, with mobility of African populations, suppression of borders, successful monetary integration leading to Africa becoming a global power.

A society where populations will be very well endowed with knowledge, an indigenous model, with an Afro-Maghreb identity, a melting pot for the East and West.

- **Sample Group 4 scenarios:**

"Chinese company Opens Sun Capsule Factory in Angola: IRES Innovation Celebrated".

The myth or metaphor is "Aton the Head of Gods, God of the Poor"

We need to have a sun economy, a corporate and hyper globalized world, where workers will be people who innovate and robots who undertake the manual work. Families will be small and individualistic, with increasing reliance on robots. Women will rule and assume power and leadership. Leadership will go down to the community level, and so we might have a return to elected community heads.

Dr. Miller then concluded the first session of the day with notions of thinking of the future based on theory and ontology.

Session 5: Futures Literacy Exercise 3: Using the Future

Dr. Miller started the session with an introduction of the background required for the participants to undertake the exercise.

He quickly presented different econometric models⁴ that were used to predict the future, such as the branching model, which even though provides the traditional "cone" of possibilities for the future, does not provide the gist of the complexity involved with the future, which requires stepping out of this approach.

- There is a need to identify the point of departure, which should help us rethink things in the present by moving outside the framework used to think of the future. Hence, the hard part of the exercise is to be able to identify the different ways of understanding the present or the "NOW", which adds to what we already do at future studies.
- There is a need to : reconcile greater freedom with collective choices, embrace greater diversity without inviting fragmentation & chaos, foster greater creativity without increasing burn-out & stress, inspire responsibility, motivate change without resorting to fear, manage risk without hierarchy, and to highlight respect for complexity while still gaining depth of understanding.

Dr. Miller then discussed how to think about change and continuity, throwing concepts such as substitution, complementarity, and emergence of novelty.

- How can we change the way we think of change? We can think of change within the system, and think of change outside the system, and understanding better how to set the menu then choose the components from the menu.
- The main problems with the future is that it reinforces a fear of uncertainty, the bias to seeking path dependency, creates a false sense of temporality of change. This is because foresight methods are mostly limited to one view of how to use the future – for preparation and planning, rarely imagining other conceptions of agency.

⁴ https://en.wikipedia.org/wiki/Econometric_model

- One of the key issues of futures literacy is to perpetuate the hold of past thinking on the present – to not escape mindsets that generate humanity’s track record of colonization in every domain.
- How do we know what we do not know? ... What we see and do in the present depends heavily on what we imagine in the future. We need to use the future to discover the present – to grasp novelty, emergence, and systemic boundaries. Conditions of change "change"! Tomorrow we can do something that we cannot do today! There is a need to provide people with systems that allows them to use the future.

Based on the request of participants, Dr. Miller quickly recapped what the gist of futures literacy is.

- Human anticipation consists of anticipatory assumptions – the choices we use to imagine the future. How can we detect human anticipatory information? Knowlabs are the microscopes of the 21st Century
- The future is a powerful tool for identifying shifting and emergent system boundaries and relations
- Using collective intelligence: sense- making as learning consists of 3 levels:
 1. Tacit to explicit- reveals existing anticipatory assumptions, end of history illusion.
 2. Reframing – question and invent anticipatory assumptions – models for describing the imaginary future.
 3. New Questions – expanding what makes sense – but it is not choice. Choice is closure, commitment to one set of anticipatory assumptions.
- How to pursue a “better future” - reframing human agency:
 1. Closed – what we prepare for (contingent futures); what we attempt to create (plan for).
 2. Open – what we discover, revealing what we did not know we knew (new sense making) and inventing the unknowable.

Towards a capacity to distinguish search from choice and to be less biased towards path dependency – colonizing the future – end of history illusion.

Dr. Miller then closed his presentation with a quote on Transformation: **“Society is now at a stage in history in which one pulse is ending and another beginning. The immense destruction that a new pulse signals is both frightening and creative. It raises fundamental questions about transformation. The only way to approach such a period, in which uncertainty is very large and one cannot predict what the future holds, is not to predict, but to experiment and act inventively and exuberantly via diverse adventures in living⁵.”**

Participants actively discussed the concepts presented by Dr. Miller. Discussions were led by Dr. Hussein Abaza, Dr. Hammou Laamrani, Dr. Khalid AbdelHalim, Ms. Malika

⁵ C.S. “Buzz” Hollings, “Coping with Transformational Change”, Options, IIASA, Summer 2010

Bouziane, Dr. Mohammad Halaïqah, and Koffie M. Kouakou in an attempt to clarify these concepts in the context we exist within. How far can we go in the future?

Dr. Miller highlighted the main concepts, emphasizing the need to create a context where experimentation is part of the approach of creating tomorrow. A look at Steve Jobs Stanford's Graduation ceremony speech, shows how 3 things that were unintended and seemed bad actually were the departing points for him.

“The future is not what will actually happen in the future. Perfecting the future is not the end. The point is not the extent of our imagination, it is how we use this imagination.”

Session 6: Future Scenarios and Windows of Cooperation with SSA

- Policy Insights and Next Steps
Dr. Riel Miller, UNESCO

In an attempt to engage participants in the exercise of using the future, Dr. Miller invited participants to discuss their experiences during the different phases of the exercise.

Some of the main points raised by participants included:

- The shift from level 1 to 2 was more conversation about lifestyles, language and a context that we didn't really discuss in phase 1.
- Session 1 was based on consensus unlike phase 2, and a more hybrid approach was developed leading to concepts like AfriMer and AfriTerre. Some of the methodologies involved destruction of geography and stepping out of closed environments, and so we considered territorial and social spaces.
- The difficulty of departing from the tyranny of the present and how to free ourselves from those references and paradigms.
- Level 1 was influenced by respective experiences and backgrounds. Therefore, there was an attempt to build a societal model that is an extrapolation of the present.
- We cannot invent or create a society without a frame of reference and so we have 2045 and the man-space-water nexus that was hard to ignore.
- The second phase was more complicated because it was new and a challenge to rational thinking, how can we build on our identity with no benchmarks or reference point? This group started from the sectoral and created the holistic picture from there, and even though some of the results like the United States of Africa is not novel because the African Union already exists, but we chose to think of novel ways of how this model can come to life.
- The transition to the second phase required thinking out of the box to address the challenges in the African continent. Where participants expressed the need to stop using the old models that are no longer working for Africa. “This exercise enables us to imagine tomorrows Africa.”
- It seems safe to say that collective thinking shows contestations to nineteenth century structures.
- The main challenge was to overcome assumptions and hypothesis to imagine the future, uncertainties about the process but not where we want to get with the

process. Crafting the future requires flexibility, adaptive capacity in the way we think, and employing systems thinking. The notion of identity as important as it is; is itself open to contestation. The economics of "enough" underlie the concept that we will not die of hunger and thirst in 2045.

- The tyranny of smartness and cleverness is another important tyranny, where some of the members of the group are able to influence others into a certain line of thought. This has led the group to adopt the "Think Local and Act Global" instead of "Think Global and Act Local".
- The impact of collective learning on coming up with innovative ideas.

Dr. Miller recapped that in order to shift policy discussions and entertain strategic alternatives, it is crucial to be able to introduce the more holistic picture and anchor it in the way people are thinking.

The challenge of level 2 is not to fall into the trap of High, medium, low scenarios, but instead to look at a more daring assumption, the same that led to the creation of compulsory education which was one of the most radical decisions made. It is not about creating a false blueprint, but recreating an identity that is able to enlarge the policy agenda.

This method is close to innovative thinking methods and hence it is an attempt to take into account disagreements that then represent new ideas and become creative.

- [Discussion on Future Cooperation Areas and Projects Between MENA and SSA & the Future Cooperation between FSF, IRES and UNESCO and other institutions](#)

Ms. Lamia Raei, Executive Director, FSF

As moderator of the discussion, Ms. Lamia Raei invited participants to engage in a discussion on potential concrete collaborations on the organizational level to support bridging MENA with SSA and to mainstream future studies in its broader sense, given FSF as an existing platform that can facilitate this process.

Participants provided the following suggestions

- **Dr. Mohammad Halaiah:** The importance of our role as individuals to spread awareness in our home countries, each according to his ability to influence. In Jordan, as a politician there is potential to take back the concepts of future studies to the highest level in Jordan.
- **Dr. Nisreen Lahham:** The diversity of the participant's backgrounds provides ground for the continuity of sustainable meetings to engage in the futures literacy, and we can start by identifying the main actors that can play a role in enhancing the work of FSF.
- **Khaled AbdelHalim** proposed few recommendations on how to move forward as a group, which included:
 1. Creating an e- knowledge base accessible to all of us, with updated references and resources.
 2. Imagining a possibility of internship training, that transforms an on-job or co-training for the group if we want to invest in its capacities.

3. Keeping the platform and the network through a diverse spectrum of activities, with possibility of holding meetings at entities like the AUC.
 4. Help FSF to quickly engage in institutional mapping to identify opportunities and challenges.
- **Dr. Medard Gambleu:** The National Bureau for Future Studies in Cote D'Ivoire, will closely follow the work of FSF and IRES and the potential to holding a conference in Cote D'Ivoire within the upcoming year. Cote D'Ivoire 2040 study addresses strategic issues such as water, urban governance and many other issues. It is important to decentralize issues and move to the South, and enlighten decision makers that there is a need to think collectively especially in light of the growing cooperation between Morocco and Cote D'Ivoire.
 - **Dr. Olugbenga Adesida:** There is a potential to support African countries to think and talk about the future within a program in attempt to create a network of African futurists, but it is difficult to be a futurist in Africa; as such the following issues need to be considered:
 1. The importance of starting small is the key to success in networking because trying to bring lots of people together is costly and time consuming.
 2. To ensure that what we learned here can be embedded and brought to the table.
 3. How to engage those with the power to act is an important question that needs to be considered.
 4. Personal initiative to promote innovation in the continent, in the way we think and to see things differently, participants here can engage in similar initiatives.
 - **Dr. Hussein Abaza:** there is a need to go regional or even beyond regional. There is a problem in Africa in being able to speak in one voice, and this forum can play a role in bridging this gap. Sharing common understanding of what is good for the region and how this can fit in the international context. There is a need to shift to a line of thinking on how the African region can transform from being a recipient to being a contributor. To move from a sectoral approach of looking at things to adopting a more holistic approach.
 - **Dr. Hammou Laamrani:** What kind of pathway we want to give to this group in terms of niche and focus. There is a knowledge gap and an institutional gap, thus the risk of competing with other existing initiatives is not a challenge.
 1. There is a need to be creative
 2. Staying small while keeping activities diverse and on demand instead of being supplied
 3. To have a knowledge repository that is to be shared aggressively and highlight the important collaboration between FSF and IRES.
 - **Dr. Abdel Aziz Adidi:**
 - Some elected officials don't see behind the horizon of their office term which is around 5 year. The future of 25 years down the road is not relevant to normal citizens because they are too busy with their immediate problems. In Morocco, we have to fight to disseminate future studies concepts.
 - The establishment of a Masters of Arts Degree on local development is needed to address what we are dealing with today in Morocco, Senegal, Egypt or any country that is willing to integrate these programs.

- To capitalize on the availability of the internet to promote this exchange and dissemination of prospective studies, because future studies needs to come out of the closed circle of experts to a wider public sphere.
- **Cheikh Sidi Mbaye:** We are lucky to have IRES as it can help in developing an MA program based on e-learning, and I am willing to contribute to the development of this program at reduced cost. This requires resources (information and innovation). The internet and digital resources represent a major opportunity for us, and the President of Pan African Center for Strategic studies is willing to serve as an advocate for all of us.
- **Dr. Julius Gatune Kariuki:** Being a futurist in Africa may be hard but being a strategist is easy: How can we work together to integrate these new concepts. A lot of the events today can be easily anticipated: how to frame what we need to do? There is an opportunity here on how to start anticipating using these tools.
- **Dr. Geci Karuri Sebina:** What can we contribute? We can use the Foresight for Development Platform (FFD) to invite all experts in the room to profile themselves at the FFD website. Put out some writings in academic and popular journals, with the potential for Koffie M. Kouakou to help in linking what has been discussed here with some of these publications. There are many platforms that will have meetings, such as UNESCO and others, so how can FSF make use of that to leverage and continue its work?.
- **Koffie M. Kouakou:** It is important to keep the purpose of this gathering clear. Champions are required to keep ideas alive and help move them forward based on very grounded expectations. What is this group really doing? Is it being useful to Africa? Do we review what we have managed to achieve? How do we present it to the people to measure the usefulness of this system? To be aware of confusing content, we need to make time to get together, 2 days are not enough. Here are some recommendations:
 1. Keep the expectations based on key practical projects with impact on Africa. The outputs of the network efforts must be useful and measurable.
 2. Beware of the potential tribal aspects of the community of practice. The network will evolve if it serves all those who are interested not a small group of experts.
 3. Beware of confusing the content (the knowledge creation, generation, sharing and management) and the logistics (characteristics and mechanics of the administration) of the community of practice. Keep them clearly separate and distinct to establish a maximum value for each component of the Community of Practice.
 4. Knowledge sharing between key roundtables and meetings is imperative. Make the roundtable a strong and useful learning linkage between the roundtables for a maximum benefits and create a measurable success.
 5. The programs and agendas of the roundtables should be considered “serious” businesses. They should be practical beyond the regular and traditional lectures and presentations. They should include and make time for field-visits in the city of venue area where the roundtables take place to create a richer sense of immersion about the realities of the host city.

6. Complete and make available a list of Arab and African futurists and also institutions to the Community of Practice to strengthen the relationship between the One Africa Futurist networks.

- **Dia El Din EL Quosy:**

1. There is a need to bridge between SSA and MENA, however there is a need to bridge between MENA countries among themselves
2. The material is very dry and needs to become softer, it is important to make it simpler and easier.

- **Dr. Kais Hammami:** There is need to clarify and specify the concepts to avoid confusion, e.g. prospectives are not scenarios and are not only related to the future but also the present, they only don't necessarily mean the long term, and hence there is a need to integrate the medium term as well. Adopting a culture-oriented approach is important if we want to anticipate future scenarios.

- **Dr. Nisreen:** The Arab Association for Futures Associations at Khartoum has started preparing a curriculum for future studies and there is a potential for cooperation in this field.

• **Closing Speech - Dr. Tawfik Mouline, IRES**

- In prospective studies⁶, the key issue is to extract ourselves from the tyranny of the present is a challenge in the private and public levels.
- The approach to be adopted should be multidimensional, before IRES was set up we engaged in prospective studies
- How to introduce prospective studies to universities: a project to come up with a comprehensive major was undertaken to be applied in two faculties, but the main challenge was whether studying this discipline would provide people with a job when they graduate.
- Create a portal to put all the information and share it.
- IRES has a toolkit for prospective learning which we can build on.
- Thanking UNESCO's foresight department, and FSF, and IRES is always open for collaboration.

In a final closing comment, Dr. Riel Miller assured participants that UNESCO will continue to test and prototype in Africa, and so there is potential to work on design and implementation.

Dr. Nisreen Lahham thanked IRES, UNESCO Paris and the participants for their time and effort to assist the Future Studies Forum for Africa and the Middle East (FSF) in achieving its mission.

⁶ A prospective study watches for outcomes, such as the development of a disease, during the study period and relates this to other factors such as suspected risk or protection factor(s). The term *prospective* usually implies a cohort selected in the present and followed into the future.

Annex 1

Roundtable II Agenda

ONE AFRICA FUTURE ROUND TABLE (II)
Future of Water and Cities in North Africa
A Futures Literacy Knowledge Laboratory
(FL Know-Lab)⁷

December 4-5, 2015

Rabat, Morocco

The Futures Studies Forum for Africa and the Middle East (FSF) and the Royal Institute for Strategic Studies (IRES) in cooperation with the Foresight Unit at UNESCO Paris are holding a **“One Africa Future Round Table”** in Rabat, Morocco on December 4-5, 2015.

This meeting is part of the activities initiated by FSF to develop foresight capacities and to scan trends in North Africa, through producing monitoring bulletins (**North Africa Horizons**), and holding round table meetings, all with support from The Rockefeller Foundation. This is the second meeting in a series titled: One Africa Future Round Table. The first meeting was held in Amman/ Jordan in May 16th & 17th, 2015.

The Rabat meeting will review the two monitoring bulletins produced by FSF titled: **“Managing Water Scarcity in North Africa”** and **“Future of North Africa’s Slums”** in addition, to **participatory** working sessions and external panel discussions, with special focus on regional trends in Africa, especially those related to water security and urban development. Participants will identify “windows of opportunity” for cooperation between Sub-Saharan Africa and the MENA region in the future.

The main objectives of this meeting are:

- Rethinking the systemic challenges and opportunities for sustainable approaches to water management and urban renewal in North Africa. Through engaging participants with the content of the two monitoring bulletins produced by FSF entitled: **Managing Water Scarcity in North Africa** and **“Future of North Africa’s Slums”**.
- Facilitating knowledge and experience sharing between experts and futurists from MENA and Sub Saharan Africa (SSA).
- Exploring the potential for joint projects amongst participating organizations such as FSF, IRES, UNESCO, etc.
- Building foresight capacities and familiarity with advanced foresight approaches, in particular UNESCO’s work around Futures Literacy.

⁷ UNESCO has been pioneering an inclusive design approach to deploying anticipatory systems, this is part of the Management of Social Transformation (MOST) programme of the Social and Human Sciences Sector of UNESCO <http://unesdoc.unesco.org/images/0023/002303/230316e.pdf>

In order to achieve all the objectives above, the workshop will adopt a UNESCO MOST **Futures Literacy Knowledge Laboratory approach** to the design and implementation of the process. The aim is to involve the collective intelligence of participants through discussions and brainstorming.

Program:

Day 1 4th December, 2015 Future of Water Management and Slums in NA	
9:00- 9:30	Registration
9:30- 11:00	<p>Session 1</p> <p>Introduction and Overview</p> <p>Welcome note</p> <p style="text-align: center;"><i>Dr. Tawfik Mouline, Director General, IRES</i></p> <p>Introduction of meeting objectives and process</p> <p style="text-align: center;"><i>Dr. Nisreen Lahham, Head of Directors Board –FSF</i></p> <p>Presentation of the Future Literacy Know-Lab concept</p> <p style="text-align: center;"><i>Dr. Riel Miller, Foresight Unit, UNESCO, France</i></p> <p>Ice breaking exercise: Introduction of participants</p> <p>Outcomes of Newsletter: Managing Water Scarcity in North Africa</p> <p style="text-align: center;"><i>Reham Yousef, Senior Researcher -FSF</i></p> <p>Challenges and opportunities of water security in NA</p> <p style="text-align: center;"><i>Dr. Dia el Qousi, Egypt</i></p> <p>Innovation in managing water resources in SSA</p> <p style="text-align: center;"><i>Dr. Julius Gatune, ACET, Ghana</i></p> <p>Overview of Newsletter: Future of North Africa’ Slums</p> <p style="text-align: center;"><i>Reham Yousef, Senior Researcher- FSF</i></p>

	<p>Challenges and opportunities of upgrading slums in NA Dr. Khaled Abdelhalim, Egypt</p> <p>Urban development and informal growth in SSA: policies and trends Geci Karuri Sabina, South Africa</p> <p>Moderated by: Koffie M. Kouakou</p>
11:00-11:30	Coffee Break
11:30- 1:30	<p>Session 2</p> <p>Futures Literacy exercise1: Future of water security and slums in North Africa</p> <p>Introduction of next steps and groups division Dr. Riel Miller, Foresight Unit, UNESCO, France</p> <p>Level 1 Futures Literacy Exercise: Expectations and normative visions (Group work) (40 min)</p> <p>Discussion of anticipatory assumptions (30 min)</p> <p>Presentation of the Learning Intensive Society model- a reframing model Dr. Riel Miller, Foresight Unit, UNESCO, France</p>
13:30- 15:00	Lunch
15:00- 16:30	<p>Session 3</p> <p>Futures Literacy exercise 2: Future of water security and slums in North Africa</p> <p>Level 2 Futures Literacy Exercise: Reframing-Layered Analysis (Group work) (60 mins)</p> <p>Discussion of level 2 anticipatory assumptions (30 min)</p>

20:00- 22:00	Dinner

Day 2- 5th May, 2015	
Future Scenarios and Windows of Cooperation with SSA	
9:30- 11:30	<p>Session 4</p> <p>Scenarios of water security and slums renewal in NA</p> <p>Scenarios development (Group work) (90 mins)</p> <p>Presentation of scenarios and discussion (30 mins)</p>
11:30-12:00	Coffee Break
12:00- 13:30	<p>Session 5</p> <p>Futures Literacy exercise 3: Using the Future</p> <p>Level 3 Future Literacy exercise (60 mins)</p> <p>Presentation of working groups and discussions (30 mins)</p>
13:30- 15:00	Lunch
15:00- 16:30	<p>Session 6</p> <p>Policy insights and next steps</p> <p>Discussion of policy insights</p> <p><i>Facilitated by: Dr. Riel Miller, FSF, UNESCO</i></p> <p>Discussion:</p> <p>Future cooperation areas and projects between MENA and SSA</p> <p>&</p> <p>Future cooperation between FSF, IRES, UNESCO and other institutions</p> <p><i>Facilitated by: Ms. Lamia Raei, Executive Director-FSF (60-70) minutes</i></p>

	<p>Meeting wrap up and way forward</p> <p><i>Dr. Nisreen Lahham, Head of Directors Board –FSF</i> (7minutes)</p> <p>Closing speech</p> <p><i>Dr. Said Moufti, Director of Research, IRES</i> (7minutes)</p>
<p>19:30- 22:00</p>	<p>Dinner Arranged by IRES</p>

Annex 2

List of Roundtable Participants (Alphabetical Order)

	Participant Name	Title	Country
1	Abbas Yunas	Research Analyst, Tabah Foundation	UAE/ London
2	AbdelAziz Adidi	Director, INAU	Morocco
3	Boudra El Mehdi	IRES	Morocco
4	Cheikh Si K M Baye	Expert on Intelligence and Governance, IPS	Senegal
5	Dia El Din EL Quosy	Professor, National Water Research Center	Egypt
6	Kouadi Claude-Médard Gambleu	BUREAU NATIONAL DE LA PROSPECTIVE ET DE LA VEILLE STRATEGIQUE	Cote d' Ivoire
7	Geci Karuri-Sebina	SA Node of Millenium Project, SA Cities, FFD	South Africa
8	Hammou Laamrani	Senior Advisor, GIZ/ League of Arab states	Morocco
9	Hussein Abaza	Senior Advisor, Ministry of Environment	Egypt
10	Ibrahim Abdoulaye	Program Specialist UNESCO- Paris	France
11	Julius Gatune Karuri	Senior Policy Advisor, ACET	Ghana
12	Kais Hammami	Chercheur-conseiller en prospective stratégique	Tunisia
13	Khaled AbdelHalim	AUC	Egypt
14	Koffi Kouakou	Director, SA Development Node	South Africa
15	Lamia Raei	Executive Director, FSF	Jordan
16	Malika	Senior Project Manager,	Germany
17	Mohammed Halaiqah	Senator, Chairman of Energy Committee, Jordan Parliament	Jordan
18	Nisreen Lahham	Head of Directors Board, FSF	Egypt
19	Olugbinga Adesisa	Director, Africa Innovation Summit	
20	Reham Yousef	Senior Researcher, FSF	Egypt
21	Riel Miller	UNESCO	France
22	Said Moufti	Director of Research, IRES	Morocco
23	Sandra Coulibaly Leroy	Organisation internationale de la Francophonie	France
24	Taofik Boudchine	IRES	Morocco
25	Tawfik Mouline	Director General, IRES	Morocco

