# NASAC-TWOWS Women for Science Workshop

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Follow-up on the InterAcademy Council Report Recommendations Supported by the InterAcademy Panel





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**Proceedings** 

### **NASAC-TWOWS Women for Science Workshop Proceedings**

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# **Acronyms and Abbreviations**

AAS	AS African Academy of Sciences		
ACTS	African Centre for Technology Studies		
ANSTS	Académie Nationale des Sciences et Techniques du Sénégal		
ASSAf	Academy of Science of South Africa		
AU	African Union		
AWARDS African Women in Agricultural Research and Develo			
AWLAE-Net	Association of Women Leaders in Agriculture and the Environment		
CEO	Chief Executive Officer		
CGIAR	Consultative Group on International Agricultural Research		
IAC	InterAcademy Council		
IAP	InterAcademy Panel		
IANAS	Inter American Network of Academies of Science		
LAC	Latin America and Caribbean		
NAE	National Academy of Engineering, United States		
NAS	National Academy of Sciences, United States		
S&T	Science and technology		
SET	Science, engineering and technology		
TWAS	Academy of Sciences for the Developing World		
TWOWS	Third World Organization for Women in Science		

# **EXECUTIVE SUMMARY**



The Network of African Science Academies (NASAC) and the Third World Organization for Women in Science (TWOWS) hosted a two-day workshop for Women for Science in Nairobi, Kenya, on 30 November to 1 December 2009. The workshop brought together women scientists and members of various academies drawn from over 10 African countries.

The objective of the two-day workshop was to present the IAC published report on Women for Science whose mandate was to propose what academies should do to remedy the widespread underrepresentation of women in science and technology (S&T). The report brings out the key areas of focus for TWOWS as promoting women leadership in S&T to advance their careers, in addition to enhancing fellowships and grants to women. Funded by IAP, TWOWS is working with regional academy networks to develop follow-up activities on the IAC recommendations.

The workshop laid out women's perceptions and experiences and identified barriers to the advancement of women in science. There is progress made so far especially with regard to women's educational achievements in science subjects. In the Arab world for instance, women have shown remarkable progress and taken the lead in SET. The reforms that women are now making will support further progress at all levels within schools, colleges and higher education institutions. Women can and must, however, overcome cultural and other barriers that still exist in their career advancement both in public and private sectors, working together with employers and with the education sector to identify ways and embed best practices such as role modelling and mentorship programmes.

The workshop discussed new principles based on partnership, mainstreaming, networking, recruiting more women scientists in the academy and mentorship programmes which are intended to support the present generation of scientists, both men and women who aspire to create a more equitable future. The National Science Academies will be called upon to proactively recruit more women scientists and include them in their activities and fully involve them in policy formulation. In addition, young upcoming scientists will need to be nurtured into the science world to ensure continuity. Equally important, is to ensure that the work done on this issue be genuinely linked with policy framework and be structured to achieve gender equality.

In conclusion, Women for Science recommendations were aimed at building on existing work of many dedicated women and men, who have tirelessly endeavoured to improve the position of women in science and to bring about real and lasting change. The impact of this change will go beyond those women working in science or aspiring to work in science, to help create more inclusive academies for the benefit of the economy and society as a whole. For this reason, the women in science must work together to implement the action plans derived from the areas of priority consolidated from this workshop.



# **OPENING REMARKS**

### Dr Thomas G. Egwang

Executive Director, AAS

Lack of women in science has been well documented. Several studies over the years have shown clear percentage disparities of men and women in various science fields in the academia world. The picture gets gloomy for the number of women faculty by ranks in sciences from various universities. In the Arab world, women have risen against all odds of culture and religion to excel in the field of science. Some great examples include Fayza Al-Khorafi, a distinguished scholar, professor and accomplished chemist from Kuwait, who was the first Arab woman to be appointed Rector of Kuwait University. Another example is Hayat Sindi, KSA, who at a young age of 20 invented a device combining the effect of light and ultrasound for use in the field of biotechnology.

It is critical to include women in the field of science, engineering and technology (SET) because a diverse workforce leads to greater innovation, utilises resources and ultimately leads to a better working and productive environment. A research carried out on workforce diversity in 12 scientific organisations had key findings: Only 1/3 of the population were high on diversity management and adhered to diversity policies. Even more worrying was that 1/12 of the organisations had no facilities for the disabled and more than 90% of the companies surveyed had a male dominated workforce.

It was evident that there are barriers hindering the girls and women in pursuit of SET careers in the Third World. Some of issues brought out in the session included lack of role models; lack of publicity aimed at women; perceived lack of job opportunities; lack of confidence; lack of encouragement from parents and teachers and a male dominated culture just to name a few. A lot can be done to reverse this picture: Women should serve as role models, advocating together with women opinion leaders to encourage young women to join science and most importantly taking the lead because no one else will!



### **Facilitated by Dr Iba Kone**

# **1.1** Purpose and Goals for the Workshop: TWOWS Perspective—Sophia Huyer, Senior Advisor, TWOWS

An appraisal was done on the history of TWOWS, that it was founded by Professor Lydia Makhubu and a few others in 1989. Its mission was to promote greater participation of women scientists and technologists in the development process of their respective countries and in the international community. Currently, TWOWS has 3700 members from 90 countries and has an Executive Board drawn from Africa, Asia, Arab States and Latin America. Since its inception, 175 PhD fellowships have been provided to women in Africa and 75 have graduated.

The session brought to the fore, the key areas of focus for TWOWS as promoting women leadership in S&T to advance their careers, in addition to enhancing fellowships and grants to women. In other areas, TWOWS has started working with young girls in primary and secondary schools to integrate science in their careers. In all this, availability of information is critical and the organisation is developing a website to mobilise support and share information. TWOWS has also partnered with SIDA and UNESCO to help in achieving these goals.

The participants were informed on how the meeting came about. InterAcademy Council (IAC) conducted a study report which was published in 2005 which outlines new initiatives to further strengthen the acceleration efforts to ensure the full contribution of women in science. As a result of this, TWOWS is working with regional academy networks to develop follow-up activities on the recommendations.

The purpose of the two-day workshop was to:

- Inform the Academy members on the recommendations of the IAC Women for Science study report.
- Learn more about strategic partners in the region.
- Exchange information with academies and other related organisations on progress, challenges and opportunities in promoting women in science.
- Create awareness on employing best practice at the academies and the secretariats.
- Discuss models for and agree on follow up activities for academies in Africa.

By and large, TWOWS hopes to continue to collaborate with academies of science to promote and support women in science in this region.



### **Facilitated by Dr Iba Kone**

# **2.1** Purpose and Goals for the Workshop: NASAC Perspective —Jacqueline Olang, Network Coordinator, NASAC

An overview was given of NASAC, its mission, and role in Africa. NASAC was founded in December 2001 under the auspices of IAP and African Science Academies to provide scientific advice for policy formulation towards economic, social and cultural development to existing academies in Africa. It was reported that there exists about 16 academies in Africa and only Egypt is not yet a member of NASAC. NASAC's existence is primarily for the following reasons:

- (i) To encourage establishment of academies where none exist and to empower those that exist;
- (ii) To present a unified voice of science in Africa and create an independent platform for credible advice.

During 2008/2009 NASAC undertook various activities and these included:

- Drafting and circulating a joint statement on brain drain in Africa.
- Developing NASAC publicity materials and website at www.nasaconline. org.
- Formation of an expert group that consists of social scientists providing oversight and foresight to NASAC activities.
- Development of guidelines and strategies for the creation of new academies.
- Organising of seminars for the secretariat officials to contribute to the mission of the academy and to employ best practices.
- Awareness workshop on the value of national science academies which was hosted by its members.

NASAC has been faced by a few challenges as far as academies in Africa are concerned. The most common problem is the limited resources to leverage the organisation to the next level of dynamism and transformation. Notwithstanding these challenges, there exist rich opportunities for tapping into, like the existence of powerful well established regional and international bodies committed to science, e.g. SADC, ECOWAS, AU. These are great avenues of networking and fundraising. The other opportunity is the acknowledgement by African governments of the need to support S&T from their gross domestic products and inclusion in their millennium development goals.

NASAC has been resourceful in a number of ways:

- (i) NASAC has presented statements and hence raising its profile, e.g. during the G8 Summit in Scotland in 2005, AU summit in Addis Ababa (Ethiopia) in January 2007, etc.
- (ii) NASAC has also been instrumental in the implementation of Strategic Action Agenda by supporting young academies and inclusion of potential members, encouraging best practice, developing and sharing expertise on funding opportunities.
- (iii) NASAC has also built strategic partners at various levels and fields to be able to achieve its mandate.



NASAC hopes for more dialogue between women scientists. Some of the changes that NASAC is eager to see are that academies learn to listen to gender experts and equal representation of women and men in research universities and as academy members. It is imperative to note that men have to be on board if the current situation has to change. In the IAC report, key recommendations for the academies included enabling women access to participation and advancement in their careers; empowering women at grassroots levels which is essential for sustainability and lastly; in setting out action plans for the academies. The creation of required action was singled out as important in strategising the way forward. The required action would obviously include the commitment to include women fully; increase the female membership in the academies; increase visibility of women scientists; establish best practice and advocate with governments for gender inclusiveness.

A conclusion was drawn that there is need to discover the basics of what exactly is required and how much resources are available and collaborations to build strong partnerships to champion the gender agenda. All these require a radical paradigm shift from the present situation.

### 2.2 Discussions

There was a point of information that there are women who have been Presidents in the academies, such as the immediate past president of Ghana Academy of Arts and Science – Prof. Letitia Obeng.

It was noted that TWOWS only focused on one segment of capacity building without a linkage for young girls to be groomed as scientists for the Academy. In response, it was clarified that TWOWS focused on the training aspect for funding reasons and was looking into ways to expand this programme to link such efforts.

Another issue raised was that TWOWS fellowships are not gender sensitive and do not consider the family component. These scholarships need to cover a stipend for the family to encourage aspiring women scientists to apply in pursuit of the careers while enhancing family values. It was noted that this is a global issue, and TWOWS is looking to partner with some universities to waive or subsidise the tuition fees for such applicants. There was a debate on gender issues in a family set-up where there is lack of support from the husband when the wife wants to relocate to pursue advancement in career.

Another recommendation was for the reassessment of age limit of 40 years for application of fellowships. It was noted that this is a key issue and it has been a struggle to review the age.

In further discussions, it was noted that more needs to be done to push the gender agenda. There is a need to create a forum where scientists listen to gender experts, talk about overcoming the challenges at hand through concerted efforts to harmonise gender inequality. One of the key considerations by NASAC is to adopt Women for Science as one of its flagship programmes.

A recommendation was given that in future there is need to include academies from Francophone countries to strengthen the network and to share best practice. It was noted that there are no resources provided for bi-lingual participation and that in future this will be considered.



Diversity issues call for a proactive approach and it was recommended that if the President of an academy is a man then the Vice President should be a woman who will be able to articulate gender issues. There was also a suggestion that the male counterparts in academies be invited to Women for Science workshops for change to happen.

In the financial debate, science has been publicised that it does not create wealth and there is no money if one pursues a career in the field. A point of clarification was that most successful scientists are not poor. A good practice like any other field is sheer commitment, integrity, dedication and sacrifice. Scientists should therefore proactively advocate so that the young see this as a viable profession, interesting and rewardingly attractive. There is also the need to demystify science. Science has a rich heritage because all communities across all ages have contributed in one way or another to it.



## Facilitated by Jacqueline Olang

# **3.1 Presentation of the Women for Science Report and Recommendations**—*Jennifer Thomson*

The science, technology and innovation capacities of all nations will be strengthened through greater participation of women in all aspects of SET. In this spirit, in 2004 the Board of the IAC formed an Advisory Panel on Women for Science with a total of 15 Presidents from various science academies. The co-chairs of the panel were Manju Sharma (India) and Johanna L. Sengers (US). The panel comprised of 10 members in total drawn from a range of scientific and technological disciplines, both male and female from four continents. The Advisory Panel's mandate was to propose specific recommendations that academies could take to increase the representation of women at all levels of S&T. The current picture of the representation of the National Science Academies is that women members constitute only 5% on average. In effect, women members are rarely in leadership roles. It is against this backdrop that the Advisory Panel had the following recommendations:

- (i) That the Presidents commit to full inclusion of women in SET, a demonstration of commitment from the top.
- (ii) Putting gender on the agenda, through a standing diversity committee, of both males and females, with one assigned member to champion it.
- (iii) Regular collection of sex-disaggregated data with conclusive follow-up.
- (iv) Widening the pool of nominations for members, for example, young scientists.
- (v) Giving visibility to women scientists by their participation in the academies activities.
- (vi) Engaging in gender research and education.
- (vii) Advising and influencing governments by advocating for legal frameworks to support these efforts.

Various ways of implementing the recommendations were presented which included coordination with other organisations through TWOWS, sharing of best practices, and IAP mechanisms and use of regional networks. The implementation of the above recommendation is imperative given that the academies represent the top scientific achievement in any country and offer expert advice to their governments. The future of scientific and technical workforce is also the academies' cause for concern.

#### 3.2 Discussions

Following the presentation, members were urged to think of how they will create opportunities for visibility and who (co-opt other members) and how they can champion it. There is also need for collaboration, where benchmarks can be set and best practice shared to encourage other academies.



## Facilitated by Jacqueline Olang

# **4.1 Roundtable Discussions by National Academy Representatives**

The open discussions revolved around what the academies are currently focusing on and what they could start doing by way of recommendations.

### Zambian Academy of Sciences

The Zambian Academy is fairly new and recruitment is ongoing. Still at its infant stage, gender issues have not come to the fore.

#### RECOMMENDATIONS:

- Get role modelling and mentorship for girls in place from the very beginning.
- Attract girls into S&T by supporting them in primary and secondary schools to advance their careers in these fields.

### Ethiopian Academy of Sciences

The Ethiopian Academy is in its formative stages and there is a Board tasked to do this. In Ethiopia, women are not getting masters and doctorate degrees that would allow their potential development into the academy.

#### RECOMMENDATIONS:

- Push the gender agenda at an early stage of its formation.
- Launching board to be drawn from various science disciplines.

### Uganda Academy of Sciences

The academy in Uganda is active with its membership constituting majority of more men than women and of the older generation. There is no female member in the Academy who is a listed professor. The Academy is also instrumental in influencing the government in pertinent issues such as herbal medicine and is invited to give talks on critical national issues such as nutrition.

#### RECOMMENDATION:

 Academy should purpose to encourage younger women scientists (Teaching Assistants and Lecturers) to join the Academy and to use the bottom-up approach in lobbying from grassroots to parliament.

### Association of Women Leaders in Agriculture and the Environment

In the discussion, it was pointed out that there are good reasons for women not being able to join the academies. The suggestions tabled were that there needs to be an affirmative action on the issue at hand; establish what the bottlenecks are and form parallel programmes so that women unlock the challenges they face.



#### RECOMMENDATION:

 Availing more information about the Academies and an affirmative action in form of policy.

### Ghana Academy of Arts and Sciences

In Ghana, the level of awareness about the academy has increased gradually though the academy is dominated by men. The Ghana education service has a programme at the district level that is funded by the government called the science clinics that raises the awareness for both the girls and their parents on science as a career.

#### RECOMMENDATIONS:

- Share best practice about the science clinics so that the same can be duplicated across other academies.
- Create a progress check on the expectations and involvement of women in the academy.

### African Centre for Technology Studies

The secretariat is well balanced. There is a need to constitute a capacity building policy in getting a well balanced gender representation of participants nominated to attend capacity building workshops.

#### RECOMMENDATIONS:

- More partnerships among academies and the private sector in terms of training and soliciting for women as facilitators in such training.
- Prioritise involvement and participation of female counterparts who are not in the academy.

### US National Academy of Sciences

Women in Science need to be more strategic in sharing best practices and success stories. In addition to this, women should help the leadership to achieve their agenda while achieving theirs.

#### RECOMMENDATION:

• Social capital networks of female scientists to be enhanced through either an informal or formal structure to get women in the academy.

#### Zimbabwe Academy of Sciences

The Academy has in the past given advice to policy makers on issues such as climate change. The leadership is still traditional and not diverse in terms of gender equality.

#### RECOMMENDATIONS:

- Look into enhancing the already existing programmes for girls and science by setting up science clubs and camps for girls in primary and secondary schools.
- Draw a list of women scientists, and start to lobby for their inclusion in the Academy and on various committees and panels.
- Start on teacher-training with emphasis on the importance of science for the girl child and for further teacher exposure to the practical world of science.
- Press for a more open minded leadership in the Academy.



### Mozambique Academy of Sciences

The Academy was formed about 9 months ago and no women were elected to the Board. Recruitment to the Academy is still ongoing and there is 50% representation of women as members. There is need to have more interaction and sharing of information with NASAC. Some issues cropped up like the role of women in the academy which needs to be clearly stated and why the academies are in existence. Another area of focus is the need to involve women to participate in mentoring the girl child in primary and secondary school. There was also another suggestion of the need to open and work with other international organisations.

#### RECOMMENDATIONS:

- Provide incentives for women scientists to participate in the academy especially in the planning process.
- Enlarge the scope of membership not just to natural science but other social sciences.

### Academy of Science of South Africa

There is need to profile women in science in the academies for public knowledge. The Academy of Science of South Africa has newly formed TWOWS national chapter. At the academy 23% of the membership is female; 20% of governing council is female and 60% of secretariat is female. There are 6 pieces of documentation that have been put in place that have allowed the academy to engage in the gender agenda. Some of the highlights are that the Academy is holding Women in Science workshop in March 2010 for the SADC region. There is a drive of mentorship programmes for young scientists within the academy and collection and analysis of sex disaggregated data. Development of women leaders has been a big problem for South Africa – There are very few women leaders. This Academy has made good progress since its inception because of the enabling environment and support for good management practices.

#### RECOMMENDATION:

• Plan to facilitate a leadership training programme for women in science and invite distinguished women scientists as speakers.

### Académie Nationale des Sciences et Techniques du Sénégal

The academy promotes SET among young girls and women. Women academicians represent about 10% of the academy members. But there are women who actively participate in the academy and are not members. The academy's concern is how to bring the girl child to school, keep them in the system and encourage them to take science subjects.

#### RECOMMENDATIONS:

- Offer prizes and scholarships to girls who excel in the field of sciences.
- Tailor-make special science courses for girls.
- Make visible women scientists who are pursuing other interests such as business or politics.
- Give a chance to women and young scientists who are dedicated to the academy to become members.

### Consultative Group on International Agricultural Research

The academy is not responsive to the dynamic society and what it is doing for the society. It needs to incorporate new and fresh blood to inject new ideas and institute change.



#### RECOMMENDATIONS:

- For academies to remain relevant they must bring in other members to institutionalise change.
- Academies must create more emphasis on women's mentorship programmes with structured process for example, role modelling for young girls, then they graduate to junior mentorship programmes and finally to scientist.
- Women should talk about what they do and raise their profile by nurturing upcoming young female scientists.

### Nigerian Academy of Science

The Nigerian Academy of Science, like the US Academy, has a very high percentage of older Fellows who were very active in their prime time. The Academy has new leadership which is helping to articulate and anticipate the women agenda. The Academy faces more pressing issues other than diversity like finding funding for its programmes.

#### RECOMMENDATIONS:

- Fine tune the nomination criteria to bring in younger and diversified cadres that are not all professors.
- Partner with the public and private sectors hence increase their participation to contribute to society.

#### Network of African Science Academies

From early childhood, culture dictates that boys are given tougher roles; tougher assignments while girls are given lighter tasks. This culture needs to be broken right from the grassroots levels to provide equal opportunities for both sexes.

For young scientists at the university level, the women have no role models to emulate. They have no mentors to help them make wise career decisions in terms of furthering their careers in the field of science.

#### RECOMMENDATIONS:

- Men should be included in women for science workshops in future.
- The scope of recruitment of members into the academies to include young upcoming scientists and fellows should be widened.
- In addition to natural scientists, other scientists should also be included.



### Facilitated by Prof. Adeyinka Falusi

# **5.1** Third World Organisation for Women in Science (TWOWS): Women for Science Regional Network—Sophia Huyer

To curtain raise this session, there was an introduction of TWOWS in Africa and its activities. In Africa TWOWS has national chapters and focal points in Congo, Nigeria, South Africa, Sudan and Tanzania with an approximate number of 1500 members in total. TWOWS has a host of key priority areas namely; institutional capacity building; focus on role modelling of the girl child in the field of science; membership mobilisation and promoting women leadership in science. 80% of the PhD fellowships go to women in African countries. Examples of countries with significant female memberships include Latvia with 35% female representation, South Africa with 24.1% and Ghana with 13.5%.

The TWAS-TWOWS advisory panel on women in science tabled the recommendations to TWAS General Assembly in October 2009. The following were recommendations made:

- In nominations and elections, an announcement of nominations should go to the academies, national chapters, TWOWS requesting the Fellows to nominate women.
- Collect sex disaggregated data on nominations and elections and monitor the success rate.
- Collect sex disaggregated data on TWAS Fellows, Young Affiliates and all TWAS activities.
- TWAS set a target for the Council of 30% female members.
- Target of 30% of prize winners and Fellows to be female.
- 30% of Chairs of Prize and Election Committee to be female.

These targets should be revisited every three years.

#### In regional collaboration:

- Participation in regional meetings should be representative of and commensurate with gender trends in degree completion in the region.
- Academies of young affiliates to have a target of 40% female.
- Aim at 30% representation of young female scientists attending young scientists' meetings.
- TWAS regional offices should support TWAS and TWOWS activities in the region.

#### Under general recommendations:

- Inclusion of women researchers and scientists on all TWAS research programmes and include components addressing gender dimension research.
- Collection of sex-disaggregated data on participation of women and young affiliates.
- Women participation in regional meetings should be representative and commensurate with the region.



#### 5.2 Women for Science Collaboration

### Latin America and Caribbean (LAC)

LAC held a consultative meeting in Mexico in April 2009 and had the key priority areas to focus namely: gender and public policies in education, S&T; removing obstacles for a career in S&T; increasing visibility of women in science and improving on collection of gender disaggregated data for S&T policy making. Their recommendations for the academies of science were:

- Have a focal point in gender;
- Stimulate relations with TWOWS, GAB and other international organisations concerned with gender in S&T;
- Work with policy makers to use toolkits and other instruments developed elsewhere to promote gender equity in S&T;
- Pursue the presence of women in committees assessing and evaluating scientists for prizes;
- Create prizes for women in science, in particular to women working as mentors:
- Establish prizes (or fellowships) for young female scientists to develop a research programme;
- Request the national grant agencies to have a mentoring programme that would include retired scientists as mentors;
- Request national grant agencies to have women in decision-making committees
  and to give support to conferences if they have a representative number of
  women in the organising committee and among speakers;
- Promote transformative leadership skills for young women scientists;
- Request national grant agencies and governments to allow for maternity leave for master and doctoral students, as well as for postdoctoral fellows;
- Request national grant agencies and governments to consider for promotion, evaluation and renewal of grants, the time taken off by women during maternity leave, nursing and caring of the elderly;
- Encourage transparency in the admission procedures of the academies;
- Provide online lists of didactics and entertaining material that would promote gender equity;
- Promote a campaign for changing the stereotype of women in science;
- Prepare books and/or documents or make available online biographies of prestigious women in science as role models;
- Foster the establishment of bridges with traditional knowledge, with emphasis in the ancestral knowledge of women.

#### **IANAS 2010**

Regional Working Group on Women for Science in LAC will be convened by IANAS in 2010.

Gender, Science and Education:

- Work with IANAS and AAS on capacity building of teachers and policy makers in gender and science education;
- Workshop with ASSAf in 2010 for policy makers in education;
- Web resources on gender and science education.



#### 5.3 Discussion

There was debate around the target set at 30%. The concern was what mechanism was used to arrive at the figure and that currently there is low uptake of women memberships in the academies hence the figure may be farfetched. Another argument was that the success rate may be low since the pick is from a small pool. An agreement was reached that for a start, 30% can be an achievable target and a reference point but should not be stated as a requirement otherwise it will be discriminatory as it 'may' be seen as lowering the existing standards.



### Facilitated by Prof. Adeyinka Falusi

# 6.1 Committee on Women in Science, Engineering and Medicine (CWSEM): Lessons from National Academies of Science (NAS) USA—Catherine Didion

CWSEM was formed in 1990 and revised its structure and mandate in 2006. Currently it has 10 members with representatives from National Academy of Sciences (NAS), National Academy of Engineering (NAE), and the Institute of Medicine (IOM). The 10 members incorporate one young member and two male members. The standing committee mandate is to:

- Serve as a resource for organisations and individuals seeking information and analysis about the status of women in scientific, engineering, and medical fields:
- Formulate strategies to collect, analyse, and disseminate information on the needs and status of opportunities for women in fields of science, engineering and medicine;
- Review relevant policies of agencies, universities, and industry designed to enhance the role of women;
- Initiate and oversee ad hoc committees to hold workshops and issue consensus reports with findings and recommendations for effective policies and programmes to remove barriers to the participation of women in sciences, engineering and medicine;
- Serve as an institutional focal point in support of complementary activities across the national academies.

The priorities for CWSEM are to be a common vehicle for NAS, NAE and IOM for the analysis of and information about women in the relevant professions, in addition to engaging its members to participate in the National Academy. Besides this, CWSEM provides resources like publications, compiles academies activities and uploads information in the website. CWSEM also seeks collaboration with other partners as well as pursues funding for its programmes.

Some of the success stories of CWSEM have been:

- Holding a workshop on critical career transition points in Fall 2008 which
  provided an opportunity to engage representatives from science, engineering,
  and biomedical societies on their activities for women members. This was
  particularly helpful because of the loss in young women scientists who do not
  want to advance their training further.
- The Committee met with National Academies' leadership and potential external partners like the EU Science Counselor to the US. The topic of postdoctoral researchers and early career constraints for women became focal point because of this effort.
- Hosting a workshop on how scientists and engineers can successfully transition into entrepreneurial careers. Participants (70%) had not attended other events on women and technical entrepreneurship.



- Various stakeholder engagements Creating change in helping focus national
  attention to the issue of gender differences through the media; working with
  US Federal programmes; maintaining good relationships with congressional
  staff on gender discussion; engaging the committee members well and overall
  public engagement.
- Gender differences report which was mandated by the Congress. The findings
  of the study were predictable Most institutions had no mechanism to increase
  the pool of women applicants. Likewise female assistant professors who were
  on a mentorship programme had a higher probability of receiving grants than
  those that did not have mentors.

In conclusion, NASAC and TWOWS can partner in three ways: commitment by both organisations to take corrective action; collection of data that will help make decisions and strategise, and finally create an organisational framework for monitoring progress.

#### 6.2 Discussion

A point of clarification was sought on the difference between TWAS and TWOWS. It was explained that both are closely associated. TWAS hosts TWOWS in Italy. Since the retirement of its founder Prof. Makhubu, TWOWS has no representation at the TWAS council. TWAS stands for Academy of Science for the Developing World which gives out prizes and offers a lot of research grants. It is a Fellow organisation. On the other hand TWOWS stands for Third World Organization for Women in Science and is an independent, non-profit making organisation which is a membership organisation.

It was pointed out that not much input comes from the TWAS and TWOWS to make the National chapters functional. It was suggested that there needs to be an annual report published so that members can be informed. In addition, lack of funding means that some Chapters have fallen away. TWAS should join forces with TWOWS, Gender Advisory Board, and NASAC to seek for funding. For a start, uploading of information in the websites was found to be useful.

The participants were given the criteria on how to become a TWOWS member: that the applicant should have one degree in science; be a natural scientist; be working at some area of science and pay a membership fee.

The participants were also informed on how to become National Chapters:

- That there should be an Executive Committee where the members are from the Academy save for one member.
- They should put together a proposal to TWOWS on their obligation, plan of action; draft constitution and by-laws;
- They should also table their strategic agenda for their National Chapters.

In terms of funding, the Chapters can start an activity on the ground and then solicit for funding.

Another issue was conveyed that women take a longer time to complete their post-graduate training which is funded to a period of a maximum of 6 years. There was a suggestion that women can be supported or support structures be put in place that will enable women not to miss out on such opportunities.



### Facilitated by Prof. Adeyinka Falusi

# 7.1 Association of Women Leaders in Agriculture and the Environment (AWLAE-Net) – Charity Kabutha

AWLAE-Net was formed in 1989–2004 as a programme of Winrock International, and in 2005 changed its legal status as a regional and international body. It has a membership of 10 African countries and each has their own Chapter. Its mandate is to build a better world by increasing agricultural productivity and rural employment while protecting the environment. AWLAE-Net's approach is to achieve its mandate by engaging men in gender advocacy because they have strength (in terms of numbers) and the resources.

The purpose of its existence is to increase the credentials, positions and influence of female leaders in policy, management, research, extension service and entrepreneurship areas of agriculture and environment.

The strategies and the outcomes of AWLAE-Net are:

- Preparing women leaders through investing in individuals by providing scholarships (BSc, MSc, PhD) and Leadership for Change training and other targeted skills training in agriculture and rural development fields. The success story has been 1500 women with leadership skills and over 600 women with scholarships for advanced studies in agricultural and environmental sciences. In addition, the project has been very transformational by enabling over 50,000 disadvantaged girls to pursue education whilst offering mentorship programmes.
- Creating an enabling environment through gender advocacy at the policy level to help create an environment that supports, appreciates and promotes women professionals in their careers. A recently published World Bank report on gender based research shows that productivity of women is 20% higher than men.
- Working with rural women farmers. This strategy was meant to create linkages
  and interactions between women scientists and rural women farmers through
  development and transfer of relevant and appropriate technologies. A good
  example of this outcome is the processing and preservation of sweet potatoes,
  fruits and tomatoes in Tanzania.
- Development of sustaining mechanisms by forging of partnerships with national and international organisations. This has helped in acquiring funding.

The speaker alluded to the fact that there have been various lessons learned. Combining multiple approaches to address gender issues yields better results. A well coordinated approach which includes getting men to advocate for change in women issues; and mentoring young girls helps them create the correct attitude towards science.



### Facilitated by Prof. Adeyinka Falusi

# 8.1 Consultative Group on International Agricultural Research Gender and Diversity Programme, The AWARD Initiative—Margaret M. Kroma

Helping poor farmers in sub-Saharan Africa overcome food crises and improve livelihoods is a complex challenge. It requires bold, innovative action. An essential step is strengthening the voice of Africa's knowledgeable women, both on the farm and in the laboratories. Acting on this conviction, in 2007 the CGIAR Gender and Diversity Program launched African Women in Agricultural Research and Development (AWARD).

80% of the women are the ones who produce food in Africa, where then is the pipe leaking?

- Culture and attitude
- Girls are not encouraged to take science subjects
- Institutional bias in the research areas Few women carrying out research.
- · Few mentors and role models.
- Gender disparities in institutions At the top there are few or no women representation hence our issues are not articulated.

AWARD cornerstones are mentoring, science capacity building and leadership capacity building. In mentorship programme, AWARD has established workshops for Fellows and mentors. In science capacity building, there stands an opportunity for a 3–9 months attachment at state-of-the-art research and development institution. The training is in science writing and presentation skills and training in writing research proposals for funding. Under leadership capacity building there is formal training course that helps women navigate organisational dynamics to get to the decision making board rooms.

The Speaker enlightened the participants on the AWARD fellowships. AWARD offers two-year fellowships to fast track the careers of African women scientists at bachelor's, masters and doctoral levels. The AWARD is unique because it has no age limit. The Fellowship is funded by the Bill and Melinda Gates Foundation to a tune of USD 15 million.



### **Facilitated by Sophia Huyer**

# **9.1** African Centre for Technology Studies – Judi Wakhungu, Executive Director

ACTS was founded in 1988, as an NGO based in Nairobi, Kenya and is a science and technology policy think-tank. The programme areas of focus include agriculture, biodiversity, and biotechnology, natural resources management, food and water security. The vision of the organisation is to steer Africa from the depths of poverty and dependence on the West to ideas-based development, focusing mainly on development and influencing of policies that would help Africa assert itself in the various fora. In other words Africa is not engaged in shaping major world debate like climate change in the international arena. ACTS focuses on asserting and ensuring that the African perspective is brought to the fore. A case in point is the Climate Conference in Copenhagen, where little attention is being given to the people at risk from climate change. Those adversely affected will be women because of food security and ACTS will ensure that there are women focal points at the negotiation table to voice their concerns. It continually pushes to shape opinion on pertinent issues like biofuels in forums when given opportunities.

Another area that ACTS focuses on is provision of training in both the private and public sectors in the area of policy formulation. They are also involved in structuring curricula with both local and international universities.

#### 9.2 Discussions

It was clarified that lobbying and pushing for various agendas does not necessarily lead to conflict of interest. It is encouraged because it draws attention to the work women are doing; gives visibility, helps them create public persona that in turn helps them career wise and pay-off ultimately because they meet with potential donors.

Within Africa, ACTS has worked and partnered with like-minded institutions where they complement each other in various ways. These include academic and research institutions where they have drawn MOUs, UN bodies and other international NGOs. The governing council of ACTS engages with partners in their country of origin. This is due to budget constraints and foreign policy (like Kenya allows only 4 expatriates).

ACTS clarified that their training programmes are now in-house for quality control purposes. Where there is individualised training needs and the demand is elsewhere, they tailor make to suit the client's needs. They focus their training on key issues like biofuels, climate change etc. They fundraise to sponsor the training conducted. Currently, they are scouting to get accredited by various universities like Edinburgh and Makerere.

In the perspective of ACTS, the strategies an organisation could use to increase women scientists in management are through mentorship programmes. Some of



the organisations have embraced this programme for instance KARI, where the senior level management attended mentorship training, thereby getting buy-in and commitment from the top and hence the implementation is effective.

In recruitment, ACTs embraces diversity and its Secretariat of about 20 staff in Nairobi and 90 associates in Africa, is dominated by women. They also get interns to come and experience the organisation thereafter acting as their referee. Organisations should make a deliberate effort in their recruitment policy to include diversity and inclusiveness where female applicants are encouraged to apply. In addition, lobbying with Governments and other institutions to get women employed in a proactive manner should be encouraged. The Governments have a code of 'equal opportunity player' though there is no audit trail to ensure compliance.

There was a point of clarification that ACTS does not monitor the change in policy issues. What they do is anticipate the change in policy, give opportunities for it to be researched and come up with a draft to be discussed.

An issue was raised that women are their worst enemies. In most organisations, there is pressure to hire women and in situations where the CEO is a woman, then chances are that the majority of the employees will be women. In the academia world, things are a little bit different because the environment is tough on women and research needs to be carried out to understand these dynamics. Moreover, it is difficult to go to the academia to lobbying for strengthening of diversity. They are not dynamic and sensitive to the change in time.

As women advocate for their agenda on gender issues like workforce diversity, there are foreseen repercussions on putting monitoring and evaluating systems because it becomes an impediment to the success of any organisation, e.g. the Black Economic Empowerment (BEE) in South Africa.

Priority areas for women in the National Academy are to actively scout for more women members by way of inviting them and proactively recruiting them. The recruitment procedures in academies are laborious and need to be changed. That notwithstanding, the names of potential women scientists need to be forwarded to the Secretariat of the Academies to commence the process. Other recommendations are that:

- The academies ensure that deserving women are invited for membership.
- The academies be more proactive in identifying qualified women; this can also be done by the women networks and committees.
- The academies need to revise their application and nomination processes to open up to a wider range of candidates.
- Age should not be a criterion of membership as it restricts some deserving members.
- Implementation of monitoring processes on diversity representation including membership and staffing.
- Each academy should include a diversity manager at the top level management to ensure ownership and accountability.
- Budget provision for the diversity manager which could attract donor funding.
- Use of sex disaggregated data on an ongoing basis to monitor representation by gender and other variables.

As a start academies should be willing to appoint a diversity focal point from the membership to kick-start the process.



### **Facilitated by Sophia Huyer**

### Review of Women for Science Recommendations; Priority Areas for the Academies and Regional Plan of Action and Agreed Priorities

### **Focus on Women**

The workshop on women for science in Africa was held to inform academy membership of the recommendations made by the *IAC Women for Science Report* with a specific focus on what academies can do to better address the gender issues. The meeting presented an opportunity for participants to learn from and network with other women leaders in the region. Through exchange of information and ideas, the meeting set forth recommendations and a plan of action that would encourage science academies to employ best practices so as to empower women scientists in their specific countries and Africa in general.

### In a Nutshell

- Academies should ensure gender mainstreaming of all activities, including strategic plans and policy documents, which should indicate targets and goals for incorporating gender issues and women scientists in academy activities and research.
- Where possible, academies should establish gender and diversity advisory committees to increase representation of under-represented groups and/or a focal point on gender, whose main function is to advise the academy president and leadership on nominations and gender issues within and outside the academy.
- 3. Academies should put in place mechanisms to nurture emerging scientists to be full members of the academy, e.g. through mentorship programmes for young women and men scientists.
- 4. Academies' websites should publish sex-disaggregated data on membership and activities on a regular basis.
- 5. Academies should advocate and/or work with policy makers to understand and implement policies to address gender equity in S&T. This may require gender/diversity training of members and leadership in the academies.
- 6. Academies should endorse the Sample Statement of Commitment of the IAC Women for Science report which states;

The President and Council of the academy commit to full inclusion of women in science and technology. The academy will:

• Strengthen good management practice – tools for inclusiveness – in its institutions and advocate such practice across the S&T community.



- Establish a committee that addresses gender issues and ensures follow-up.
- Promote women members to decision-making levels and include them in panels and committees.
- Increase the number of women scientists in the nomination pool for membership, prizes, and awards.
- Give visibility to women scientists and represent women in the academy's portrayal of science.
- Pay attention to gender implication of research sponsored or evaluated by the academy.
- Ensure that the criteria for evaluation of research institutes include organisational culture.

# Recommendations

Following extensive deliberations, the workshop postulated seven (7) key recommendations that academies should strive to achieve. These are as follows:

- 1. Academies should **reach out to more women members** by ensuring that:
  - 1.1 Deserving women scientists are identified and invited to become members;
  - 1.2 Members are more proactive in identifying qualified women; and
  - 1.3 Academy women's networks and committees play a role in identifying eligible women for academy membership.
- **2. Increase diversity in the membership** of academies through:
  - 2.1 Revising the application procedures, nomination processes and qualification criteria to open up to a wider range of membership and candidates, e.g. private sector, public sector, international organisations, NGOs; and
  - 2.2 Establishing young members' categories to encourage greater participation of young women and men scientists.
- 3. Academies should **implement monitoring processes on diversity representation in membership and staffing** by:
  - 3.1 Ensuring that top management includes a gender/diversity manager who reports on progress made in increasing the participation of diverse groups in academy activities. The manager's time should be included in the Academy's annual budget and funding sourced for the position;
  - 3.2 Appointing a gender focal point from academy membership;
  - 3.3 Collecting, reporting and using sex-disaggregated data on an ongoing basis to monitor representation by gender, ethnicity, age, ability and other characteristics, as well as participation in Academy activities and bodies/panels.
  - 3.4 Reporting the findings of the sex-disaggregated data yearly to the Academy board or council; and
  - 3.5 Advocating and setting targets to reach more equal representation.
- 4. Proposed **targets for academies** to strive for:
  - 4.1 Thirty percent representation of women in membership OR at rates representative of women's participation in science in the country;
  - 4.2 Thirty percent representation of women on governing councils or boards;
  - 4.3 Thirty percent representation of women on membership committees; and
  - 4.4 Thirty percent representation of women on other academy panels and *ad hoc* or standing committees.



In recognition of the fact that some academies may take a longer time to reach these targets, it is proposed that the targets be reviewed every three (3) years.

- 5. Academies should **promote women involvement** in science related initiatives by:
  - 5.1 Ensuring social capital of female scientists is enhanced through provision of networking opportunities;
  - 5.2 Encouraging participation of female counterparts from other sectors outside the academies in Academy activities;
  - 5.3 Providing support structures (such as daycare, flexible meeting times) to encourage and enable women to become involved in academy work; and
  - 5.4 Profiling academies to young male and female scientists, and other groups in society.

# 6. Academies should **encourage women and girls to pursue careers in science** through:

- 6.1 Supporting women to gain research funding by providing information on targeted grants, mentoring young women scientists in grant and proposal writing; increasing awareness of fellowship and research grant opportunities;
- 6.2 Sourcing and publicising gender-targeted funding, grants, prizes and scholarships for top female students and young scientists;
- 6.3 Providing advice to the public and private sectors on modalities for recruitment, retention and advancement of women scientists;
- 6.4 Developing role model schemes where women scientists and young academy members work with female students at all levels, such as the Meetthe-Scientist-events, or science-clinics, etc. to bring young people into contact with science and scientists;
- 6.5 Promoting science activities (clubs)/camps to girls in primary and secondary schools;
- 6.6 Promoting and advising governments on teacher-training aspects in science as well as diversity and inclusion issues; and
- 6.7 Working with the education sector to impart gender-appropriate science education pedagogy to female and male teachers, including information on curricula, resources and training.

#### 7. In the course of **promoting science within the society**, academies should:

- 7.1 Use gender-sensitive participatory approaches in outreach programmes and setting priorities get input from grassroots.
- 7.2 Engage with diverse stakeholders in academy activities and priority setting;
- 7.3 Establish collaboration with national and regional organisations addressing gender, S&T issues, such as TWOWS, Gender Advisory Board, AWLAE, etc.

# **Priority Action Areas**

To achieve the above recommendations, science academies should partner with other institutions such as TWOWS, national gender initiative, S&T organisations, Gender Advisory Board among others. The following three priority action areas were identified.



### 1. Building gender capacity and input of women into academies

- 1.1 Implement gender and diversity mainstreaming, training and monitoring processes in academies as well as address implicit biases through cultural competence/intelligence training.
- 1.2 Introduce and develop gender issues and analysis in capacity building initiatives, for example through briefing of policy makers, or provision of gender information fact sheets on national issues.
- 1.3 Undertake activities to promote local recognition of women scientists such as prizes, competitions, media profiling, etc. For instance, NASAC should liaise with the African Union, while national academies should partner with other science organisations that recognise women at the national level such as the Ministry of Science, Education and Technology.
- 1.4 Initiate mentoring /leadership programmes within academies.
- 1.5 Encourage training workshops on advocacy and influencing policy for purposes of gender capacity building targeting both academy members and national policy makers.
- 1.6 NASAC in collaboration with other institutions and academies should develop and deliver gender and diversity training programmes with academies.
- 1.7 NASAC should convene an overarching regional body to promote gender issues and gender capacity building in national academies by:
  - 1.7.1 Setting up sub-regional and national committees for academies to work with other gender and S&T groups; and
  - 1.7.2 Working with sub-regional bodies to provide gender-focused leadership through different activities.
- 1.8 Establish or promote the establishment of TWOWS national chapters.

#### 2. Networking, supporting women in science and increasing profile

- 2.1 Identify and profile women scientists in the country through accurate data collection possibly through:
  - 2.1.1 Collecting and publishing data on women's representation in academies and in disciplines across the country. The results should be posted on the academy, NASAC and TWOWS web sites;
  - 2.1.2 Adopting policies/programmes promoting women in academies; and
  - 2.1.3 Adopting best practices on, and researching promising models for promoting women in science within academies.
- 2.2 Support programmes for networking, access to information on grants and funding opportunities, e.g. by hosting grant and proposal writing workshops; and
- 2.3 TWOWS-NASAC to host a website for women scientists' networking.

#### 3. Working with younger girls

- 3.1 Encourage science promotion activities in schools such as science clubs/camps.
- 3.2 Mobilise academy membership to go to schools for outreach programmes.
- 3.3 Advise governments on the development of gender-sensitive curricula in science for the African context.
- 3.4 Promote role model and Meet-the-Scientist events or programmes to be held in conjunction with academy activities, such as conferences and workshops; and
- 3.5 Hold sub-regional workshops on gender-sensitive science education, e.g. with the relevant authorities, such as policy makers, teachers and practitioners.



# **Next Steps**

- Establishment of an ad-hoc working group on Women for Science in Africa (NASAC or TWOWS to set up an email list for the working group).
- 2. Recommendations and Next Steps to be circulated to participants, including list of working group members.
- Development of funding proposals by NASAC to support gender initiatives within academies.
- 4. NASAC to send recommendations to Presidents of Academies.
- 5. Academy representatives to formally table recommendations at a relevant academy meeting; advocate the acceptance of the recommendation within their academies; and identify and work with internal champions/allies. Participants agree to be champions for acceptance of the recommendations.
- NASAC to request academies to respond to the recommendations by April 2010.
- 7. Working group members to report back to the NASAC and TWOWS by April 2010 through email, in person or at a gathering in September 2010.
- 8. National academies to choose priorities for focus areas.
- 9. All members of NASAC to subscribe to the TWOWS update list and subsequently receive guidelines on the establishment of national chapters from TWOWS.
- 10. Efforts to be made to translate the recommendations into French and Portuguese; the Académie des Sciences et Techniques du Sénégal (ANSTS) and the Academy of Science of Mozambique (ASM) will translate the recommendations into French and Portuguese, respectively.
- 11. Participants to lobby for the nomination of at least five women scientists for membership in their academies in the next cycle of nominations; and
- 12. Working group members to identify allies and champions within and outside of the academies to work with high-level women.



# **CLOSING SESSION**

### **Facilitated by Mame Binta Gaye**

### **Closing Remarks and Vote of Thanks**

The conference resulted in various outcomes mainly recommendations for the Academy; ways of promoting women in the Academy; avenues for promoting women in science and the next priority steps for immediate implementation. The participants showed commitment and energy to ensure that the workshop had achieved its objectives. The same passion would be carried in the implementation of the action plans.

Further, the participants were thanked for taking time off their busy schedule to attend the workshop. The NASAC Secretariat was also thanked for ensuring the smooth running of the conference and the principal facilitator for ensuring the agenda of the conference had been achieved.

In closing, the participants were encouraged to keep on sharing their success stories and experiences across the network. There exists a rich network, and it is important to tap into it. In addition, the participants were encouraged to make in-roads in their sphere of influence to ensure that they make a difference in one way or another – women are the only ones who can make the change happen. It was seen as an important element to recognise and celebrate success in future.

# **APPENDIX 1**



# **List of Participants**

	Participant	Country	Email
1.	Sophia Huyer	Canada	shuyer@twows.org
2.	Dr Catherine Didion	USA	CDidion@nas.edu
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23.	Ms Victoria Odhiambo	AAS	v.odhiambo@aasciences.org



Participants who attended the NASAC-TWOWS Women for Science Workshop



# **APPENDIX 2**

### **Programme**

### **NASAC-TWOWS Women for Science Workshop**

Hosted by the Network of African Science Academies (NASAC) 30 November – 1 December 2009, Nairobi, Kenya

### **Workshop Objectives**

- 1. Inform Academy members on the recommendations of the IAC Women for Science study report;
- 2. Learn more about strategic partners in the region;
- 3. Exchange information on academies' progress, challenges and opportunities in promoting women for science;
- 4. Create awareness on employing best practices at academy operational and secretariat levels; and
- 5. Discuss and agree on model(s) for follow-up activities for academies in Africa.

Date	Time	Activity			
30 NOVEMBER 2009	30 NOVEMBER 2009				
	8.00 am – 9.00 am	Registration of participants			
	OPENING SESSION:	GOALS AND CONTEXT			
Facilitator:	9.00 am – 9.15 am	Self-introduction by participants			
Iba Kone AFORNET-AAS	9.15 am – 9.30 am	Opening remarks by AAS: <b>Thomas Egwang</b> , <i>Executive Director</i> , <i>AAS</i>			
	9.30 am – 9.50 am	Purpose and goals for the Workshop – TWOWS perspective: <b>Sophia Huyer</b> , <i>Senior Advisor</i>			
	9.50 am – 10.20 am	Purpose and goals for the Workshop – NASAC perspective: <b>Jacqueline Olang</b> , <i>Network Coordinator</i>			
	10.20 am – 11.00 am	Group Photo/Refreshments			
Facilitator: Jacqueline Olang NASAC	11.00 am – 11.30 am	Presentation of the Women for Science report and recommendations: <b>Catherine Didion</b> , <i>Women for Science Study Group Member</i>			
	11:30 am – 1:00 pm	Roundtable discussions by Academy representatives:     Academy activities supporting women in science     Areas of interest for academies – Enhancing the roles of women scientists within academies			
	1.00 pm – 2.00 pm	Lunch Break			

Continued on next page



#### Continued from previous page

Date	Time	Activity		
Facilitator:	MODELS FOR ACTION			
Adeyinka Falusi NAS, Nigeria	2:00 pm – 2:30 pm	Third World Organization for Women in Science (TWOWS), Women for Science Regional Networks: Sophia Huyer, Senior Advisor		
	2.30 pm – 3.00 pm	Committee on Women in Science, Engineering and Medicine of the National Academies of Sciences, USA: <b>Catherine Didion</b> , <i>Director</i>		
	OPPORTUNITIES FOR COLLABORATION			
	3.00 pm – 3.30 pm	Consultative Group on International Agricultural Research (CGIAR) Gender and Diversity Programme: Margaret M. Kroma, Fellowships Manager and Science Coordinator, African Women in Agricultural Research and Development (AWARD)		
	3.30 pm – 4.00 pm	Refreshment Break		
	4:00 pm – 4:30 pm	Association of Women Leaders in Agriculture and the Environment (AWLAE-Net): <b>Charity Kabutha</b> , <i>Board Member</i>		
	4.30 pm – 5.00 pm	African Centre for Technology Studies (ACTS): <b>Judi Wakhungu</b> , <i>Executive Director</i>		
	6.30 pm – 8.00 pm	Welcome Reception		
1 DECEMBER 2009				
Facilitator:	GROUP DISCUSSION AND BRAINSTORMING			
Sophia Huyer TWOWS	9.00 am – 10.30 am	Discussion:  Women for Science priorities in sub-Saharan Africa – for Academies and for development  Priority areas for academies for: support to women in science; capacity building on gender issues and networking  Sample statement of commitment for academies Identification of opportunities for collaboration		
	10.30 am – 11.00 am	Refreshment Break		
	11.00 am – 1.00 pm	Discussion (continued) Identification of potential programmes and strategies at regional and national levels Is there interest in a regional initiative on gender capacity-building in African academies? What are the key priorities, actions and base conditions? Regional Plan of Action and agreed priorities		
	1.00 pm – 2.00 pm	Lunch Break		
Facilitator:	CLOSING SESSION			
Mame Binta Gaye ANSTS, Senegal	2.00 pm – 2.30 pm	<ul><li>Reflections from the workshop</li><li>Summary and way forward</li></ul>		
	2.30 pm – 3.00 pm	Closing Remarks and Vote of Thanks Sophia Huyer and Jackie Olang		



# **APPENDIX 3**

Revue des recommandations de l'atelier «Les femmes pour la Science»; Domaines prioritaires pour les Académies, Plan d'Action Régional et Priorités Concordées

### LES FEMMES EN POINT DE MIRE

L'atelier sur les femmes pour la science en Afrique a été organisé pour informer les membres des académies des recommandations issues du *Rapport de l'IAC sur les femmes pour la science* en mettant spécialement l'accent sur ce que peuvent faire les académies pour mieux répondre à la problématique genre. La réunion a offert aux participants une opportunité de s'informer auprès d'autres femmes dirigeantes de la région et d'engager le dialogue avec elles. Grâce aux échanges d'informations et d'idées, la réunion a pu formuler des recommandations et des mesures à prendre à l'étape suivante, qui soient à même d'encourager les académies des sciences à user des bonnes pratiques pour appuyer les femmes scientifiques dans leurs propres pays en particulier et en Afrique en général.

### RESUME DES RECOMMANDATIONS A L'ATTENTION DES ACADEMIES

- Veiller au souci d'égalité entre hommes et femmes dans toutes les activités, y compris les plans stratégiques et les documents d'orientation, qui devraient indiquer les objectifs et buts en matière d'intégration de la dimension genre et des femmes scientifiques dans les activités et recherches menées par les académies.
- 2. Mettre en place, si possible, des commissions genre et diversité pour une meilleure représentation des groupes sous-représentés et/ou un chargé de liaison sur le genre, ayant essentiellement pour mission de conseiller le président et la direction de l'académie au sujet des propositions de candidats et de la dimension genre au sein et en dehors de l'académie.
- 3. Etablir des mécanismes aux fins de préparer les scientifiques débutants à devenir des membres à part entière de l'académie, par le biais de programmes d'encadrement des jeunes scientifiques, hommes et femmes, par exemple.
- 4. Publier régulièrement sur leur site Web des données ventilées par genre sur leurs membres et activités.
- 5. Faire campagne et/ou collaborer avec les décideurs pour comprendre et mettre en œuvre les politiques visant à assurer un traitement équitable entre hommes et femmes dans les domaines scientifique et technologique. Pour ce faire, une formation préalable en genre/diversité des membres et de la direction de l'académie serait probablement nécessaire.
- 6. Faire leur, le modèle de Déclaration d'engagement contenu dans le Rapport de l'IAC sur les femmes pour la science, qui stipule ce qui suit:

Le Président et le Conseil de l'académie s'engagent à œuvrer à la pleine intégration des femmes dans les domaines scientifique et technologique. L'académie est appelée à:



- Renforcer la pratique de la bonne gestion –outils d'inclusivité au sein de l'institution et plaider en faveur de cette pratique auprès de l'ensemble de la communauté scientifique et technologique.
- Créer une commission chargée de traiter la problématique genre et d'en assurer le suivi.
- Promouvoir l'accès des femmes membres aux niveaux de décision et les inclure dans les groupes d'experts et commissions.
- Promouvoir les candidatures de femmes scientifiques à l'académie, aux prix et récompenses.
- Faire mieux connaître les femmes scientifiques et veiller à ce que les femmes figurent sur le registre scientifique de l'académie.
- Accorder toute l'attention voulue aux incidences sexospécifiques des recherches subventionnées ou évaluées par l'académie.
- Veiller à inclure la culture organisationnelle au nombre des critères d'évaluation des institutes de recherche.

### RECOMMANDATIONS

Au terme de longues délibérations, l'atelier a formulé sept (7) recommandations que les académies devraient s'efforcer de traduire dans les faits, notamment les suivantes:

- 1. Les académies devraient **s'efforcer de se doter de plus de femmes membres** en veillant à ce que:
  - 1.1 Les femmes méritantes soient identifiées et invitées à devenir membres;
  - 1.2 Les membres s'attèlent plus résolument à la recherche de femmes qualifiées; et que
  - 1.3 Les réseaux et comités de femmes participent à la recherche de femmes répondant aux critères.
- 2. Renforcer la diversité dans la composition des académies comme suit:
  - 2.1 Réviser les procédures de demande d'affiliation, les processus de présentation de candidatures et les critères de qualification pour favoriser un plus large éventail de candidats: secteur privé, secteur public, organisations internationales, ONG, etc.
  - 2.2 Instituer des catégories de jeunes membres pour encourager une plus grande participation de jeunes scientifiques des deux sexes.
- 3. Mettre en œuvre des modalités de contrôle de l'observation du critère de diversité dans la composition et le personnel des académies, comme suit:
  - 3.1 Veiller à ce que la haute direction comprenne un administrateur chargé des questions «genre/diversité», qui suive et fasse rapport sur les progrès accomplis en la matière. Le temps de travail de cet administrateur est à prévoir au budget annuel de l'académie et dans le financement acquis pour ce poste.
  - 3.2 Nommer un chargé de liaison sur le genre parmi les membres.
  - 3.3 Utiliser et faire régulièrement le point sur les données ventilées par sexe aux fins de contrôler la représentation selon les critères de genre, d'ethnicité, d'âge, de compétence et d'autres caractéristiques, ainsi que la participation aux activités et organes/groupes d'experts de l'académie.
  - 3.4 Rendre annuellement compte des données réunies et ventilées par genre à l'organe directeur ou conseil de l'académie. Et
  - 3.5 Plaider en faveur d'une représentation plus égalitaire et fixer les objectifs à atteindre en la matière.



#### 4. Objectifs que les académies devraient s'efforcer d'atteindre:

- 4.1 Représentation de trente pour cent de femmes en leur sein ou à des niveaux représentatifs de la participation des femmes aux activités scientifiques du pays.
- 4.2 Représentation de trente pour cent de femmes dans les conseils ou organes d'administration.
- 4.3 Représentation de trente pour cent de femmes dans les commissions de membres. Et
- 4.4 Représentation de trente pour cent de femmes dans d'autres groupes d'experts et commissions *ad hoc* ou permanentes de l'académie.

Compte tenu du fait que certaines académies ont probablement besoin de plus de temps pour les réaliser, il est proposé de revoir ces objectifs tous les trois (3) ans.

- 5. Les académies sont appelées à **promouvoir la participation des femmes** aux initiatives, comme suit:
  - 5.1 Veiller à renforcer le capital social des femmes scientifiques en leur offrant des opportunités de coopération en réseau.
  - 5.2 Encourager la participation d'homologues féminins d'autres secteurs non académiques aux activités de l'académie.
  - 5.3 Mettre en place des structures d'appui (crèches, horaires de réunion souples, etc.) pour permettre aux femmes de s'impliquer dans le travail de l'académie. Et
  - 5.4 Faire connaître les académies aux jeunes hommes et femmes et à d'autres groupes de la société.

# 6. Les académies devraient **encourager les femmes et filles à embrasser une carrière scientifique** grâce aux mesures suivantes:

- 6.1 Aider les femmes à acquérir un financement pour la recherche en leur fournissant des données sur les subventions convoitées, en encadrant les jeunes femmes scientifiques pour les demandes de subvention et la rédaction d'offre; en les sensibilisant davantage aux possibilités d'obtenir des bourses de recherche et des subventions en la matière.
- 6.2 Trouver un financement aux fins de subventions à offrir en fonction du genre, y compris des prix, des bourses, des subventions pour la formation à l'exercice de responsabilités et des voyages à l'occasion de conférences pour les étudiantes du supérieur et les jeunes scientifiques.
- 6.3 Conseiller les secteurs public et privé sur les modalités de recrutement, de fidélisation et d'avancement des femmes scientifiques.
- 6.4 Elaborer des projets de modèle de rôle pour les femmes membres et jeunes membres de l'académie aux fins de travailler avec les étudiantes à tous les niveaux, comme à l'occasion des Journées de rencontre ave les scientifiques ou des ateliers d'initiation à la science, etc. en vue de mettre les jeunes en contact avec la science et les scientifiques.
- 6.5 Promouvoir les activités scientifiques (clubs)/camps auprès des filles des écoles primaires et secondaires.
- 6.6 Promouvoir les divers aspects de la formation pédagogique en matière scientifique ainsi que de diversité et d'inclusion et orienter les pouvoirs publics à ce propos. Et
- 6.7 Coopérer avec le secteur éducationnel aux fins d'inculquer aux enseignant(e)s une pédagogie scientifique idoine en matière de genre, y compris des données sur les programmes d'études, les ressources et la formation.



- 7. Dans la promotion de la science dans la société, les académies sont appelées à:
  - 7.1 User d'approches participatives sexospécifiques dans la mise en œuvre de programmes de sensibilisation du public et l'établissement de priorités mettre la population à contribution.
  - 7.2 Consulter diverses parties prenantes dans le cadre des activités et de l'établissement des priorités de l'académie.
  - 7.3 Collaborer avec les organisations nationales et régionales oeuvrant dans les domaines du genre, de la science et de la technologie, comme TWOWS, le Conseil consultatif sur le genre, AWLAE, etc.

### **DOMAINES D'ACTION PRIORITAIRES**

Pour mener à bien les trois actions suivantes, les académies de science sont appelées à travailler en partenariat avec d'autres institutions comme TWOWS, l'initiative nationale axée sur le genre, les organismes scientifiques et technologiques, le Conseil consultatif sur le genre, entre autres. Les actions prioritaires sont exposées cidessous.

# 1. Renforcement des capacités en matière de genre et apport des femmes aux académies

- 1.1 Mettre en œuvre des processus d'intégration du souci d'égalité entre hommes et femmes et de la diversité, de formation et de suivi au sein de l'académie et parer aux partis pris implicites par la compétence/intelligence culturelle.
- 1.2 Approfondir et introduire la problématique homme-femme et l'analyse genre dans le processus de renforcement des capacités en informant les décideurs ou en fournissant des données intégrant le genre sur les préoccupations nationales, par exemple.
- 1.3 Prendre des mesures visant à promouvoir la reconnaissance des femmes scientifiques à l'échelon local: prix, concours, publicité dans les médias, etc. Le NASAC devrait, par exemple, coopérer avec l'Union africaine, et les académies nationales, travailler en partenariat avec d'autres organismes scientifiques qui reconnaissent les femmes à l'échelle nationale, tel le Ministère de la Science, de l'Education et de la Technologie, etc.
- 1.4 Instituer des programmes d'encadrement/formation à l'exercice de responsabilités dans le cadre de l'académie.
- 1.5 Encourager les ateliers de formation au plaidoyer et à la stratégie d'influence pour les besoins du renforcement des capacités à l'intention des membres de l'académie aussi bien que des décideurs nationaux.
- 1.6 Veiller à ce que le NASAC, en collaboration avec d'autres institutions, conçoive et fournisse, avec le concours des académies, des programmes de formation au genre et à la diversité.
- 1.7 Veiller également à ce que le NASAC convoque un organe régional d'envergure aux fins de promouvoir la problématique genre et le renforcement des capacités en matière de genre au sein des assemblées nationales en :
  - 1.7.1 Créant des commissions sous-régionales et nationales aux fins de permettre aux académies d'agir conjointement avec d'autres groupes spécialisés en genre, science et technologie. Et
  - 1.7.2 Se concertant avec les organismes sous-régionaux aux fins de promouvoir, par diverses activités, les capacités d'exercice de responsabilités dans le respect des spécificités des deux sexes.
- 1.8 Créer des sections nationales de l'organisme TWOWS sur le genre en science et technologie, en collaboration avec les académies de science, si possible.



# 2. Constitution de réseaux, appui aux femmes scientifiques et prise de mesures pour rehausser leur image

- 2.1 Identifier et faire connaître les femmes scientifiques du pays par la collecte de données précises en procédant comme suit, dans la mesure du possible:
  - 2.1.1 Réunir et diffuser des données sur la représentation des femmes dans les académies et branches d'activité du pays. Les résultats sont à publier sur les sites Web de l'académie, du NASAC et de la TWOWS.
  - 2.1.2 Recenser les politiques/programmes de promotion des femmes au sein de l'académie.
  - 2.1.3 Recenser également les bonnes pratiques, les modèles prometteurs de promotion des femmes en matière scientifique dans le cadre de l'académie
- 2.2 Appuyer les programmes de réseautage, l'accès à l'information sur les subventions et possibilités de financement en organisant, par exemple, des ateliers sur la rédaction de demande de subvention et d'offre.
- 2.3 Amener la TWOWS-NASAC à héberger un site Web pour la constitution de réseaux de femmes scientifiques.

### 3. Mise à contribution des jeunes filles

- 3.1 Encourager les activités de promotion de la science dans les écoles, tels les clubs/camps scientifiques.
- 3.2 Mobilier les membres de l'académie pour des campagnes de sensibilisation dans les écoles.
- 3.3 Encourager la conception de programmes scientifiques sexospécifiques pour le contexte africain.
- 3.4 Instituer (par les académies) des journées ou programmes de présentation de modèle de rôle et de rencontre avec les scientifiques ou des programmes à l'occasion des conférences, ateliers.
- 3.5 Organiser des ateliers sous-régionaux sur l'enseignement scientifique sexospécifique, avec les décideurs par exemple, sur les échanges de bonnes pratiques, etc.

### **ETAPE SUIVANTE**

- 1. Mettre sur pied un groupe de travail ad hoc sur les femmes pour la science en Afrique (avec établissement, par le NASAC ou la TWOWS, d'une liste d'adresses électroniques pour ce groupe de travail).
- 2. Transmettre les recommandations et les mesures à prendre à l'étape suivante aux participants, avec la liste des membres du groupe de travail.
- Elaborer (par les soins du NASAC) des propositions de financement à l'appui de l'initiative genre.
- Adresser (par les soins du NASAC) les recommandations aux présidents des académies.
- 5. Veiller à ce que les représentants de l'académie rendent compte à l'institution et plaident pour qu'elle fasse siennes les recommandations; présentent formellement celles-ci lors d'une réunion de l'académie; identifient et agissent de pair avec les défenseurs/alliés internes de la cause. Les participants consentent volontiers à plaider en faveur de l'approbation des recommandations.
- 6. Demander(parlessoinsduNASAC)aux académies de réagir aux recommandations d'ici avril 2010.
- 7. Engager les membres du groupe de travail à faire rapport au NASAC et à la TWOWS d'ici avril 2010 par courrier électronique; rendent compte en personne en septembre de la même année.



- 8. Déterminer (par les académies nationales) les priorités qui méritent une attention particulière.
- 9. Veiller à ce que tous les membres figurent sur la liste actualisée de la TWOWS et reçoivent par la suite les lignes directrices en matière de création de sections nationales de la TWOWS.
- 10. S'efforcer de traduire les recommandations en français et portugais. L'ANSTS (Sénégal) se chargera de la traduction en français, et l'ASM (Mozambique), de la traduction en portugais.
- 11. Proposer (par les soins des participants) au moins cinq femmes scientifiques pour admission au sein de leur académie au prochain cycle de dépôt de candidatures.
- 12. Inviter les membres du groupe de travail à identifier les alliés et défenseurs de la cause au sein et en dehors de l'académie pour agir de pair avec eux, dont des femmes de haut rang.



# **APPENDIX 4**

### Revisão das recomendações sobre mulheres de ciência; áreas prioritárias para as Academias e Plano de Ação Regional e Prioridades Aprovadas

### **MULHERES EM FOCO**

O seminário sobre as mulheres para a ciência em África realizou-se para informar aos membro da Academia as recomendações feitas pelo Report da IAC para as Mulheres na Ciência com foco específico sobre o que as Academias podem fazer para melhor abordar as questões de gênero. A reunião, deu às participantes uma oportunidade de aprender e interagir com outras mulheres líderes da região. Através do intercâmbio de informações e idéias, o encontro prpôs recomendações e um plano de ação que incentiva as Academias de Ciência a empregar as melhores práticas, de modo a capacitar as mulheres cientistas nos seus países em especial e em África em geral.

# NO CERNE DA QUESTÃO

- As Academias devem garantir igualdade de géneros em todas as atividades, incluindo os planos estratégicos e documentos de orientação política, que deverão indicar os objectivos e metas para incorporar as questões de gênero e atividades das mulheres cientistas na academia e na investigação
- 2. Sempre que possível, as academias devem estabelecer comités consultivos diversos do gênero para aumentar a representação de grupos sub-representados e nomear um ponto focal de gênero, cuja função principal é assessorar o presidente da academia e a liderança sobre questões de gênero dentro e fora da Academia.
- 3. As Academias devem criar mecanismos para estimular os cientistas emergentes a tornarem-se membros efectivos da academia, por exemplo, através de programas de orientados para jovens cientistas mulheres e homens incluídos.
- 4. Os Websites das Academias devem publicar dados desagregados por sexo numa base regular sobre a composição e as atividades.
- 5. As Academias deverão advogar e/ou trabalhar com os responsáveis políticos para compreender e implementar políticas de modo a abordar a equidade de gênero em C&T. Isso pode exigir treino e formação de gênero e postos de liderança nas Academias.
- 6. As Academias deverão subscrever a exemplo de declaração do Compromisso da Mulher para a Ciência da IAC chjo relatório afirma:

O Presidente e o Conselho e da academia comprometem-se com a plena inclusão das Mulheres na Ciência e Tecnologia. A academia deverá:

- Reforçar as boas práticas de gestão ferramentas de inclusão nas suas instituições e advogar tais prática em toda a comunidade da Ciencia e Tecnologia.
- Estabelecer uma comissão que trata das questões de género e garantir o seguimento.
- Promover as mulheres membros para os níveis de decisão e incluí-las em painéis e comissões.



- Aumentar o número de mulheres cientistas no pool de nomeação para a adesão, prémios, e awards.
- Dar visibilidade às mulheres cientistas e real representação na Academia de Ciência.
- Preste atenção à implicação do género na pesquisa patrocinada ou avaliadas pela academia.
- Garantir que os critérios de avaliação nos institutos de pesquisa incluem a cultura organizacional.

## RECOMENDAÇÕES

As seguintes deliberações extensivas, o workshop postulou sete (7) principais recomendações que as academias devem-se esforçar para cumprir. Estas são as seguintes:

- 1. Academias deve abrabger mais mulheres, assegurando que:
  - 1.1 Identificar e convidar mulheres cientistas a se tornarem membros;
  - 1.2 Identificar membros mulheres qualificadas mais pró-activas; e
  - 1.3 Redes da Mulher Academica e comitês devem desempenhar um papel na identificação de mulheres elegíveis para a adesão à Academia.
- 2. Aumentar a diversidade na composição das academias, através de:
  - 2.1 Revisão dos procedimentos de aplicação, processos de nomeação e critérios de qualificação para se abrir um leque mais alargado de candidatos a adesão, por exemplo, setor privado, setor público, organizações internacionais, ONGs e
  - 2.2 Estabelecer categorias de membros mais jovens "para incentivar uma maior participação dos jovens cientistas (mulheres e homens).
- 3. Academias devem implementar processos de acompanhamento sobre a representação da diversidade de membros e de pessoal através de:
  - 3.1 Garantir que a gestão de topo inclui o género/secretariado que faz relatórios de progressos alcançados no aumento da participação dos diversos grupos em actividades de academia. Este secretarido deve ser incluído no orçamento anual da Academia e deve haver fudos para esta posição;
  - 3.2 Nomear o ponto focal de gênero a partir de membros da academia;
  - 3.3 Colher informações e utilizando dados desagregados por sexo numa base contínua para monitorar a representação por gênero, etnia, idade, capacidade e outras características, bem como a participação nas atividades de academia, órgãos e ou painéis.
  - 3.4 Reportiar os resultados de dados desagregados por sexo anualmente ao conselho da Academia, e
  - 3.5 Advogar e fixar metas para alcançar uma representação mais igualitária na Academia.
- 4. Metas propostas para Academias se esforçarem por:
  - 4.1 Trinta por cento de mulheres representadas como membros ou aumentar a taxa da participação das mulheres na ciência no país;
  - 4.2 Trinta por cento de das mulheres representadas em conselhos administrativos ou comités:
  - 4.3 Trinta por cento das mulheres representadas nas comissões; e
  - 4.4 Trinta por cento das mulheres representadas em painéis da academia e outras comissões ad hoc ou em funcionmento.



Em reconhecimento do fato de que algumas academias poderão levar mais tempo para atingir estes objectivos, propõe-se que as metas sejam revistas a cada 3 (três) anos

- 5. Academias devem promover a participação das mulheres nas iniciativas relacionadas com a ciência através de:
  - 5.1 Garantindo que o capital social das mulheres cientistas é reforçada através de oportunidades em rede;
  - 5.2 Encorajar a participação das outras mulheres de outros setores fora da academia nas atividades da Academia;
  - 5.3 Fornecendo estruturas de apoio (tais como creches, horários de reuniões flexíveis) para encorajar e capacitar mais mulheres a se envolver nos trabalhos da academia; e
  - 5.4 Criar perfis academicos para jovens cientistas do sexo feminino e do sexo masculino e outros grupos da sociedade.
- 6. Academias devem encorajar mulheres e jovens a seguirem carreiras em ciência, através de:
  - 6.1 Apoiando mulheres a ganhar o financiamento da investigação, fornecendo informações sobre bolsas, orientando jovens mulheres cientistas na concepção de propostas escrita; consciêncialização crescente de oportunidades de bolsas de estudo e de pesquisa;
  - 6.2 Fornecendo e publicitando o financiamento ao gênero-alvo de fundos, prêmios, bolsas de estudo para as melhores estudantes e jovens cientistas;
  - 6.3 Prestar consultoria para os setores público e privado sobre as modalidades de recrutamento, retenção e promoção das mulheres;
  - 6.4 Desenvolver regimes modelo no qual as mulheres cientistas e jovens membros da Academia trabalham com os estudantes do sexo feminino a todos os níveis, tais como o eventos de Encontro de cientista, ou ciências clínicas, etc para levar os jovens a estarem em contacto com a ciência e cientistas;
  - 6.5 Promover atividades de ciência (clubes)/campos de raparigas nas escolas primárias e secundárias;
  - 6.6 Promover e assessorar os governos sobre os aspectos de formação de professores no domínio da ciência, bem como a diversidade e as questões de inclusão; e
  - 6.7 Trabalhar com o sector da educação para transmitir pedagogia adequada ao gênero na educação científica para os professores do sexo feminino e masculino, incluindo informação cobre Curricula, fontes e treino.
- 7. No decurso de promoção da ciência na sociedade, as academias devem:
  - 7.1 Usar abordagens participativas sensíveis ao gênero em programas de divulgação e definição de prioridades para obter avanços a partir das bases;
  - 7.2 Enquadrar as diversas partes interessadas nas atividades da academia e definição de prioridades;
  - 7.3 Estabelecer colaboração com organizações nacionais e regionais ligadas ao género, questões C&T, como TWOWS, Conselho Consultivo do Género, AWLAE, etc.

# AREAS PRIORITÁRIAS

A fim de atingir as seguintes 3 acções, as Academias de Ciência farão parceria com outras instituições tais como a TWOWS, a iniciativa do gênero no âmbito nacional,



organizações de C&T, conselho consultivo do género, entre outros. Os domínios de acção prioritários são identificados a seguir.

- 1. Reforço das capacidades de género e de entrada de mulheres nas academias
  - 1.1 Implementar a integração e diversidade, treino e processos de monitoria do gênero em academias, bem como abordar preconceitos culturais implícitos através da competência inteligência.
  - 1.2 Desenvolver e introduzir as questões de género e análise, por exemplo no desenvolvimento de capacidades através de informação dos decisores políticos, ou o fornecimento de folhas de género fato de informações sobre questões nacionais.
  - 1.3 As actividades destinadas a promover o reconhecimento das mulheres cientistas locais, tais como prémios, concursos, visibilidade, etc. Por exemplo, NASAC deverá entrar em contacto com a União Africana, enquanto as academias nacionais devem estabelecer parcerias com organizações de outras ciências que reconhecem as mulheres a nível nacional como Ministério da Ciência, Educação e Tecnologia, etc.
  - 1.4 Iniciar Programas de tutoria liderança dentro de academias.
  - 1.5 Incentivar oficinas de formação em advocacia e influenciar a política para fins de capacitação de género visando tanto os membros da academia e os decisores políticos nacionais.
  - 1.6 NASAC em colaboração com outras instituições deve desenvolver e oferecer programas de diversidade de género e de formação com as academias.
  - 1.7 NASAC deverá convocar uma entidade de cúpula regional para a promoção das questões de género e capacitação de género em academias nacionais:
    - 1.7.1 Criação de sub-comissões regionais e nacionais de Academias para trabalhar com outro género e grupos C&T; e
    - 1.7.2 Coordenar com corpos sub-regionais para fornecer liderança com foca no género através de diferentes atividades.
  - 1.8 Sempre que possível, estabelecer capítulos nacionais TWOWS em matéria de C&T, em colaboração com as Academias de Ciência.
- 2. Networking, para apoiar as mulheres na ciência e dar maior visibilidade
  - 2.1 Identificar o perfil de mulheres cientistas no país, através da recolha de dados precisos, possivelmente através de:
    - 2.1.1 Cohleita e publicação de dados sobre a representação das mulheres nas academias e em disciplinas no país. Os resultados deverão ser publicados na academia, NASAC e sites de TWOWS.
    - 2.1.2 Recolha de políticas/programas de promoção das mulheres nas academias.
    - 2.1.3 Recolha de boas práticas, modelos promissores para a promoção das mulheres na ciência dentro de academias.
  - 2.2 Apoiar programas para redes, acesso à informações sobre bolsas e oportunidades de financiamento, por exemplo através do acolhimento de proposta de subvenção e oficinas de escrita.
  - 2.3 TWOWS-NASAC devem hospedar um site para redes das mulheres cientistas.
- 3. Trabalhando com Raparigas e Jovens
  - 3.1 Incentivar atividades de promoção da ciência nas escolas, como clubes de ciência/acampamentos.
  - 3.2 Mobilizar membros da academia para irem às escolas para programas de extensão.



- 3.3 Estimular o desenvolvimento de currículos sensíveis sobre o género na ciência para o contexto Africano.
- 3.4 As Academias deve estabelecer modelo de eventos ou programas de encontros de cientista no âmbito de conferências, workshops.
- 3.5 Assegurar workshops sub-regionais sobre a integração de sensibildades da educação ligadas ao género, por exemplo, com os decisores políticos, a partilha de boas práticas, etc.

# PRÓXIMOS PASSOS

- Criação de um grupo ad hoc de trabalho sobre as mulheres para a ciência em África (NASAC, TWOWS ou a criação de uma lista de e-mail para o grupo de trabalho).
- 2. Recomendações e próximos passos a serem distribuídos aos participantes, incluindo a lista de membros do grupo de trabalho.
- 3. Desenvolvimento de propostas para financiamento pela NASAC para apoiar iniciativas do género.
- 4. NASAC deve enviar recomendações aos presidentes das Academias.
- 5. Os Representantes da Academia devem levar as recomendações às suas academias e advogarr para a sua aceitação; formalmente apresentá-los numa reunião da Academia; identificar e trabalhar com os campeões interno/aliados. Os participantes concordam em ser campeões para a aceitação das recomendações.
- NASAC deve solicitar às Academias para responder às recomendações em Abril de 2010.
- Membros do grupo de trabalho devem apresentar um relatório à NASAC e TWOWS até Abril de 2010, através de e-mail; relatório de volta em pessoa, em setembro de 2010.
- 8. As Academias nacionais devem escolher as prioridades me foco.
- 9. Todos os membros participantes devem estar na lista de atualização TWOWS e, posteriormente, receber orientações sobre o estabelecimento capítulos nacionais da TWOWS.
- 10. Serão envidados esforços para traduzir as recomendações em Francês e Português. ANSTS (Senegal) irá traduzir as recomendações para o francês; ASM (Moçambique) irá traduzir para Português.
- 11. Participantes devem nomear pelo menos 5 mulheres cientistas para a adesão em suas academias no próximo ciclo de candidaturas.
- 12. Membros do grupo de trabalho devem identificar aliados e campeões dentro e fora das Academias para trabalhar com elas; envolver as mulheres de alto nível.



The Network of African Science Academies (NASAC) is an autonomous scientific organisation, established at the initiative of the African Academy of Sciences (AAS – www.aasciences.org) and supported by the Inter Academy Panel (IAP – www.interacademies.net). The Network Secretariat is currently based at the AAS in Nairobi, Kenya and hosted the event to discuss the recommendations of the InterAcademy Council (IAC) Report on *Women for Science*.

For more information on NASAC, visit www.nasaconline.org. For more information on IAC, visit www.interacademycouncil.net.



TWOWS, the Third World Organisation for Women in Science, was founded in 1989. Its mission is to increase women's access to science and technology and promote greater participation of women scientists and technologists in the development process of their respective countries and in the international community. As at December 2009, TWOWS had a network of more than 2900 members from some 90 developing countries (113 countries in total). TWOWS is hosted by TWAS, a founding supporter of the organisation.

For more information on TWOWS, visit www.twows.org. For more information on TWAS, visit www.twas.org.