

WEMA 2011 Social Audit Report

Ethical, Social, Cultural, and Commercialization (ESC²) Audit Report
for the Water Efficient Maize for Africa (WEMA) Project 2011

Ethical, Social, Cultural, and Commercialization Program
Sandra Rotman Centre*
University Health Network and University of Toronto
Toronto, Canada
January 2012

INTRODUCTION

The Water Efficient Maize for Africa (WEMA) project seeks to bring drought-tolerant maize varieties, through conventional breeding, marker-assisted breeding, and biotechnology, to five African countries (Kenya, Mozambique, South Africa, Tanzania, and Uganda), royalty free by 2018. In doing so, WEMA faces issues of public trust that are uniquely associated with complex public-private partnerships (PPPs) that involve the development of genetically modified (GM) crops. There are ethical, social, cultural, and commercialization (ESC²) concerns related to the varied interests and priorities of organizations in the project, and a variety of unique viewpoints surrounding GM crops. Such concerns lead to diminished trust on the part of stakeholders and the public, and in turn could pose a significant barrier to the achievement of WEMA's humanitarian goals.

The Ethical, Social, Cultural, and Commercialization (ESC²) Program at the Sandra Rotman Centre, at University Health Network and University of Toronto conducted the first and second social audits of the WEMA project in October 2009 and October 2010, and released social audit reports in February 2010, and February 2011. We used qualitative and quantitative interview tools that had been developed through the ESC² framework and piloted over the previous years with internal and external stakeholders of the WEMA project. Each year we conducted 100 interviews across the five WEMA countries, on ESC² issues of the WEMA project. We also reviewed key documents, and observed project meetings and interactions with project staff. The data collected was analyzed and reported in the Social Audit Reports. The reports were distributed and presented to WEMA management and stakeholders, and shared publicly on the WEMA website, hosted by one of the managing partners, the African Agricultural Technology Foundation (AATF). WEMA management responded to actionable key findings made in the reports, and incorporated some considerations into WEMA project plans for 2010 and 2011.

In this report, we discuss the 2011 Social Audit, conducted between August and November 2011. Where appropriate, we draw comparisons between findings of the 2009, 2010, and 2011 social audits.

HOW WE CONDUCTED THE 2011 SOCIAL AUDIT

In August 2011 the ESC² team (Appendix 1) began the third annual audit of the WEMA project to track ESC² issues over the year. One of our objectives was to carry out an audit from which results could be compared to those of the 2009 and 2010 audits. We evaluated WEMA's performance using a range of lenses from the ESC² analytical framework (including technical, regulatory, deployment, capacity building, charitable purpose, project management, and communication). Viewpoints of 100 stakeholders from across the five WEMA countries were collected using a quantitative questionnaire and a qualitative interview guide. The stakeholders were from a wide variety of stakeholder groups (Figure 1), including 92 per cent repeat respondents from the 2009 and/or 2010 social audits, and 2 per cent from the pilot or preliminary audits. Twenty-six per cent of respondents were selected from WEMA country teams. Document analysis and observation of project meetings and stakeholder interactions were also carried out. All data was analyzed, and is presented here as actionable key findings and recommendations.

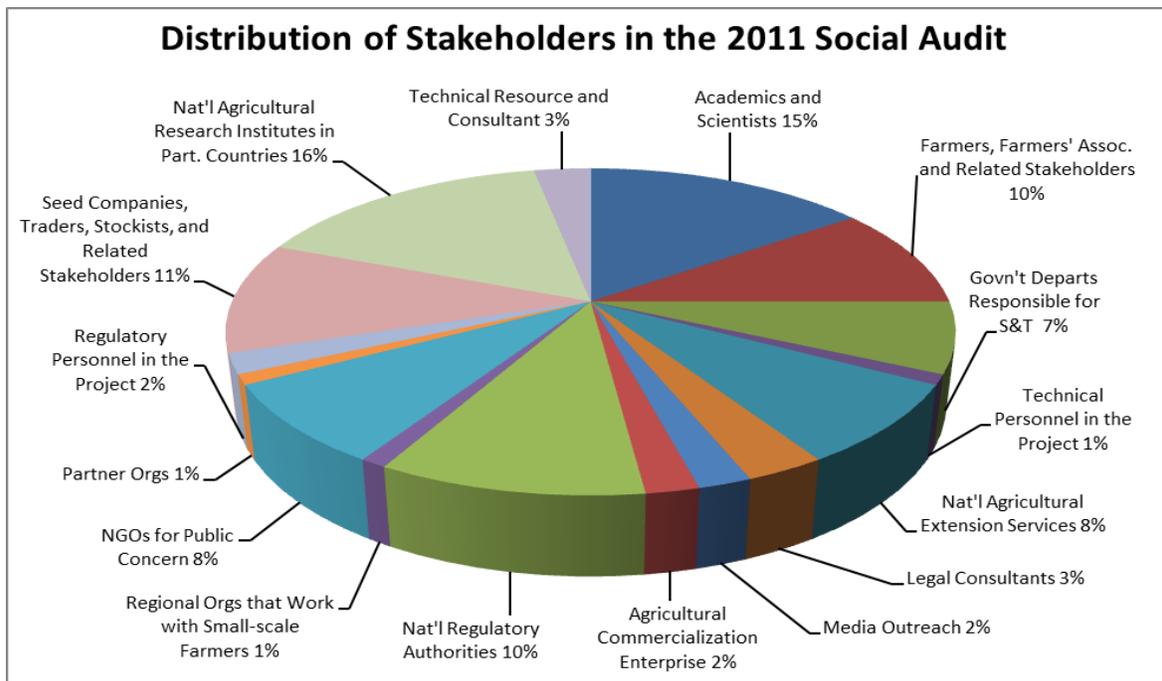


FIGURE 1: STAKEHOLDERS INTERVIEWED IN THE 2011 SOCIAL AUDIT N = 100

KEY FINDINGS

The 2011 Social Audit has six overall key findings, and eight country-specific key findings, presented as actionable results. The overall key findings are those relevant to all five WEMA countries.

I. OVERALL ESC² EVALUATION OF THE WEMA PROJECT REMAINS 'GOOD'

WEMA stakeholders believe ESC² issues are being adequately addressed in the project, with an average rating of 'good' in 2009, 2010, and 2011. We have seen improvement in average ratings in Kenya and Tanzania in 2011, with no change in South Africa in the last year, or in Mozambique and Uganda in the last two years. Lower average ratings by Seed Companies and Related Stakeholders, and Non-governmental Organizations (NGOs) for Public Concern, National Agricultural Extension Services, and Media Outreach, may be due to limited engagement and attention to the concerns of these stakeholder groups around issues of deployment (as discussed further in key finding 4 and Appendix 2). Stakeholders have expressed concern that a lack of attention to the needs and issues raised by these groups may have negative consequences for the success of the project in terms of public perception of WEMA technologies during the deployment phase of the project.

II. COLLABORATIONS HAVE IMPROVED, AND CAN CONTINUE TO IMPROVE WEMA COMMUNICATIONS

Stakeholders found WEMA communications to have improved through collaborations, and called for continued, enhanced collaboration with existing agricultural organizations (i.e., media programs, research institutions, focal point farmers, NGOs, religious organizations, microfinance institutions, and farmers' organizations) to act as intermediaries, widen stakeholder reach, and improve public awareness of the WEMA project. Stakeholders also suggested strengthening the effectiveness of collaborations by providing well-packaged, accurate, and relevant information, and providing continuous training and evaluation of the intermediaries.

III. WEMA COMMUNICATION CAN CONTINUE TO IMPROVE ON DELIVERING TAILORED INFORMATION TO A WIDER RANGE OF STAKEHOLDER GROUPS

Stakeholders provided an average rating of 'fair to good' for WEMA communication. WEMA communications have established multiple outlets for information sharing with WEMA stakeholders, including organizing regional and country stakeholder meetings, bulletin distribution, and providing a frequently asked questions (FAQ) page on the AATF Web site. However, stakeholders reported a need for continuous, tailored information to a wider range of stakeholder groups. They found WEMA communication efforts to be limited to the privileged (e.g., academicians and scientists), inward looking (limited to the project management), and lacking targeted outreach to extension staff, farmers, farmers associations, millers, policy makers, and WEMA leaders. Stakeholders indicated low general public awareness of the WEMA project, less information about WEMA in the media over the past year, and called for greater emphasis on the role of conventional breeding in the project.

IV. WEMA'S DEPLOYMENT PLAN IS UNCLEAR TO MANY STAKEHOLDERS

Stakeholders recognized the potential of WEMA technologies to alleviate the adverse effects of drought on maize, to contribute to improved food security, household income, and seed business, through its charitable purpose or royalty-free aspect. They acknowledged the initial efforts by the deployment team to engage with seed companies as deployment plans are finalized, and requested more information about this process in terms of involving seed companies, WEMA seed reaching farmers, and commercialization of the final product. Stakeholders also wondered about funding plans for sustaining WEMA activities beyond 2017. (See Appendix 2 for stakeholders' specific questions regarding deployment of WEMA seed.). Stakeholders suggested giving commercialization priority to select local seed companies and having farmers play a central role in providing access to and distribution of WEMA seed, with the possibility of farmers recycling the seeds. Stakeholders from seed companies not presently engaged by the project advised that there should be greater proactive involvement of their stakeholder group.

V. CLARITY IS NEEDED ON THE PERFORMANCE OF WEMA TECHNOLOGIES

Stakeholders are appreciative of WEMA's quest to alleviate the effects of drought on maize by the use of drought-tolerant varieties. Stakeholders suggested that trait stacking should be considered upfront, and posed a host of questions regarding yield, adaptability to varied agro-ecological conditions, pest and disease resistance, bio-fortification, and storability. (See Appendix 2 for stakeholders' specific questions.) Stakeholders from the seed industry considered the future of WEMA products to be closely linked to the technologies being stacked, as well as the provision of information on agronomic practices, irrigation, fertilizer requirements, and access to credit.

VI. POSITIVE INTERACTIONS AMONG WEMA PARTNERS ARE VALUABLE TO THE PROJECT

Stakeholders from partner organizations acknowledged positive relationships among project partners, with an average rating of 'good' to 'very good,' similar to 2009 and 2010 ratings. Stakeholders considered this to be evident in the progress of various project activities undertaken by the partners, and the fact that the NARS, CIMMYT, and Monsanto have allowed the use of their germplasm for this project. One stakeholder acknowledged the improved relations through the inclusion of the NARS in the WEMA Operations Committee (OPSCOM), a concern that had been raised in the 2010 Social Audit. As a result of these positive relationships in the partnership, WEMA is regarded as a flagship project on technology transfer from the private sector; as providing learning opportunities to academicians in research on transgenics; and offering regulators opportunities to build capacity and make decisions based on local evidence.

COUNTRY-SPECIFIC KEY FINDINGS

The following eight country-specific key findings, presented as actionable results, capture issues raised by WEMA stakeholders that are unique to individual WEMA countries.

MOZAMBIQUE

WEMA SHOULD BE COGNIZANT OF THE UNIQUE CONTEXT FOR DEPLOYMENT IN MOZAMBIQUE

Two stakeholders from Mozambique commented on the need for WEMA to develop in the context of each country's unique policies and social and cultural circumstances. Stakeholders suggested considerations for deployment of WEMA seed, including: the underdeveloped seed industry in Mozambique; prevalence of maize seed recycling by farmers; limited capacity at the Mozambique Institute of Agricultural Research (IIAM) for production of basic seed; and the current government policy for enhanced use of open pollinated varieties (OPVs).

COMMUNICATION COULD BE ENHANCED WITHIN AND AMONG PROJECT TEAMS IN MOZAMBIQUE

Stakeholders in Mozambique commented that communication could be enhanced within and among project teams regarding ongoing team activities. It was suggested that all communication be shared with the regulatory, product development, and communication team leads in the country.

REQUIRED REVISION TO THE BIOSAFETY LAW IN MOZAMBIQUE HAS DELAYED WEMA TRIALS

Stakeholders were concerned that WEMA transgenic trials are being delayed by the request from Monsanto to revise a section of the biosafety law, regarding liability acceptance by the applicant (in this case NARS). The application for importation of transgenic materials, prepared by the regulatory team, cannot be launched due to this issue. One stakeholder from a regulatory authority observed that the lack of assumption of liability by Monsanto may send a concerning message to the national authorities. Another stakeholder commented on the need to consider, acknowledge, and respect differences in legal environments between the United States and Mozambique during the application process, as such laws encapsulate the culture of the people and other country-specific issues.

SOUTH AFRICA

BETTER UNDERSTANDING OF THE ANTI-GM CONCERNS IN LUTZVILLE, SOUTH AFRICA IS NEEDED

Many stakeholders raised the issue of anti-GM campaigns in Lutzville, South Africa. They reported that the bone of contention regarding the WEMA confined field trials (CFT) by the Agricultural Research Council (ARC) is the need for land by members of the local farming community, who are primarily grapevine farmers with little interest in cultivating maize. Stakeholders suggested that a communication strategy supported by a better understanding of the farming community in the area, in terms of their needs, language, education level, and racial disparities, as well as engagement of community groups regarding their concerns and progress in the project would help address opposition to WEMA CFTs.

TANZANIA

LACK OF COMMUNICATION EXPERTISE IN TANZANIA WEAKENS WEMA'S ABILITY TO ADDRESS STAKEHOLDER CONCERNS

Tanzanian stakeholders recognized an absence of active communication about the project during the past year, due to a lack of communication lead and team in the country. Active engagement of stakeholders will raise awareness about the technologies and will address a number of stakeholder concerns around deployment and impact of WEMA seed. (See Appendix 2 for stakeholders' specific questions.)

THE REGULATORY CAPACITY TO HANDLE WEMA TRANSGENIC MATERIALS CAN CONTINUE TO BE ENHANCED IN TANZANIA

Stakeholders from the regulatory team acknowledged that WEMA training has given members of the team the confidence to handle WEMA biosafety matters. This local capability to address biosafety concerns may be helpful in supporting the review of the strict liability clause. One internal stakeholder encouraged enhancing capacity building by training more people, with emphasis on risk assessment, while an academic suggested doing so through the involvement of university students in WEMA activities.

CONCERNS EXIST ABOUT REDUCED WEMA ACTIVITY IN TANZANIA DUE TO DELAYED REVISION TO THE BIOSAFETY STRICT LIABILITY CLAUSE

Stakeholders perceive that the strict liability clauses in the Tanzania biosafety guidelines may be the greatest hindrance to the progress of the WEMA project if not attended to. There is concern among stakeholders that the funders and the technology providers may withdraw from Tanzania if the issue is not tackled promptly, though the WEMA regulatory team has indicated that project funders will continue to support activities for conventional varieties. Stakeholders suggested that delay in availability of the transgenic varieties in the country is likely to influence farmers' perceptions of the project's ability to deliver. Currently, Tanzania is thought to be about two years behind other WEMA countries, such as Kenya and Uganda, which are already in their second season of WEMA transgenic trials.

UGANDA

DELAY IN UGANDA TO ENACT THE BIOSAFETY LAW ALLOWING COMMERCIALIZATION MAY HINDER PROGRESS OF THE PROJECT

Stakeholders suggested the delay by the government to enact the biosafety law in Uganda has been slowing the process toward commercialization of WEMA technologies. They observed that there are efforts by biosafety and biotechnology stakeholders to move the bill forward to law, though the recently sworn-in parliament may delay the process further, as members will need to be brought up to speed on the proposed law.

RECOMMENDATIONS

The recommendations presented here follow from the action steps implied in all of the key findings above. They provide possible directions for the WEMA project to consider going forward, taking into account current WEMA activities, and pertain to all domains of the project (technical, regulatory, capacity building, deployment, charitable purpose, project management, and communication), thereby requiring action from all project teams.

Possible actions related with communications

- i. Increased collaborations have contributed to improvements in WEMA communications in the past year. Continued efforts to collaborate with existing stakeholder groups and institutions will be beneficial for acquiring intermediaries for wider stakeholder reach and improved public awareness of WEMA technologies.

Dissemination of information to a wider range of stakeholders should be tailored to stakeholder groups' specific needs and concerns with the project, and cognizant of their language, education, and interests. For example, understanding the underlying issues of opposition to CFTs, by each stakeholder group in Lutzville, South Africa, (farmers, community groups, and anti-GM activists), including crop preferences, access to land, and the role of Monsanto in the project, can inform WEMA communications of how to respond accordingly to each group's point of contention.

Providing quality information to collaborative intermediaries (such as WEMA champions and NGOs involved in agricultural biotechnology communication) through ongoing training and evaluation, and continuing successful communication efforts with internal stakeholders to reach external stakeholders (i.e., farmers, farmers' associations, policy makers, millers, and extension services) will also be beneficial for awareness creation WEMA technologies.

- ii. WEMA stakeholders require more information on the performance of WEMA technologies. (See Appendix 2 for specific questions.) Although WEMA has made progress in this area, particularly through the publicly accessible FAQ Web page on the WEMA Web site, questions remain regarding adaptability, expected yields, trait stacking, and required agronomic practices. We recommend that WEMA provide answers to stakeholders' questions listed in Appendix 2, and make clear to stakeholders that WEMA involves both conventional and transgenic technologies.
- iii. WEMA should expedite efforts to establish a communications lead and team to execute the WEMA communications strategy in Tanzania. Effective engagement about WEMA is needed among policy makers and at the grassroots level for awareness of the technologies, and to alleviate stakeholders' concerns.
- iv. Greater information sharing among project teams regarding WEMA activities, product development in particular, is needed in Mozambique.

Possible action related to deployment

- v. We recommend that the WEMA project provide greater engagement and attention to the concerns of seed companies, NGOs, National Agricultural Extension Services around issues of deployment. (See Appendix 2 for specific questions by these stakeholder groups.) Clarity is needed about how seed companies will be involved in seed distribution, how WEMA technologies will reach the farmers, and how WEMA activities will be sustained beyond 2017. We recommend that WEMA partners provide responses to stakeholder questions outlined in Appendix 2.

Possible action related to regulatory capacity

- vi. The WEMA project has made an effort to join in the development of the biosafety law in Mozambique. We recommend enhancing engagement of the WEMA project team in Mozambique for improved understanding of the need for review of the biosafety laws so the partners in the country can proceed in tandem with others in the process.
- vii. We recommend continuous engagement of government and non-government stakeholders in Tanzania to ensure a review process of the strict liability clause in the biosafety framework, to allow for continued transgenic activities in the country. We also recommend engagement of farmers regarding WEMA conventional varieties, for continued awareness of WEMA technologies. Enhancing regulatory training to continue building local capacity to address biosafety concerns and WEMA transgenic technologies will support regulatory efforts in the country, as well.

Possible action related to project governance

- viii. WEMA is a leading project that has raised the bar high with respect to product efficacy and timeliness for delivery. Continued involvement of all WEMA partners and continuous availability and access of information to all stakeholders particularly on the progress of WEMA activities will be important for maintaining high regard for the project.

APPENDIX 1: SOCIAL AUDIT TEAM

| NAME | INSTITUTIONAL AFFILIATION | CATEGORY OF MEMBERSHIP | REGIONAL AFFILIATION |
|-------------------------|----------------------------------|-------------------------------|-----------------------------|
| Abdallah S. Daar | Sandra Rotman Centre | Co-Principal Investigator | Canada/Tanzania |
| Jennifer Deadman | Sandra Rotman Centre | Research Analyst | Canada |
| Obidimma Ezezika | Sandra Rotman Centre | Team Leader | Canada/Nigeria |
| Justin Mabeya | Sandra Rotman Centre | Research Consultant | Kenya |

APPENDIX 2: QUESTIONS RAISED BY STAKEHOLDERS REGARDING DEPLOYMENT AND PERFORMANCE OF WEMA TECHNOLOGIES

| <i>Deployment</i> | <i>Performance</i> |
|--|---|
| <p>Costs and royalties</p> <ul style="list-style-type: none"> ▪ What will WEMA seed cost? ▪ For how long will it be royalty free? ▪ Will the royalty-free aspect impede commercial production and distribution by local seed companies? ▪ What is Monsanto's agenda in providing royalty-free technology? ▪ Who funds research and development, and what is the return on their investment? | <p>Adaptability</p> <ul style="list-style-type: none"> ▪ Which gene is responsible for drought tolerance, and what is it capable of? ▪ Are WEMA varieties being tested to simulate multiple agro-ecological zones (i.e., drought, heat, multiple rainfall systems or water levels), and will they be adaptable to these varied conditions? |
| <p>Intellectual property rights</p> <ul style="list-style-type: none"> ▪ Will there be exclusive licensing of WEMA seed? ▪ Who will own the WEMA varieties, and what will be the implications for farmers regarding affordability and the reuse of indigenous seeds? ▪ Will there be an expiration date on trait patents? ▪ Will there be continued work by organizations such as CIMMYT and AATF to develop seeds and license newer, patent-protected seeds? | <p>Potential Yield</p> <ul style="list-style-type: none"> ▪ What are the WEMA production ratios (tonnage of maize per kilo of seed)? ▪ Has the possibility of reduced yields as a result of crop improvement been addressed? ▪ What is the nutritional content of the maize? |
| <p>Seed distribution</p> <ul style="list-style-type: none"> ▪ What will the criteria be for seed company selection? ▪ How will seed companies commercialize when they do not feel engaged by WEMA? ▪ How will WEMA seed be produced, packaged, and distributed? ▪ What will be the role of farmers' associations, extension staff, and government agencies to address deployment challenges? ▪ What will be the fallback option if WEMA seed is unavailable and indigenous seeds are phased out? | <p>Additional Traits</p> <ul style="list-style-type: none"> ▪ To what extent will WEMA seed be resistant to insects, striga weed, aflatoxin, pests, diseases, and varying storage conditions? ▪ Will WEMA seed be bio-fortified with vitamins, protein, and minerals to address malnutrition concerns in the continent? |
| <p>Quality control</p> <ul style="list-style-type: none"> ▪ What mechanisms will be put in place for monitoring and evaluation of the new technologies after commercialization (i.e., labeling for informed consumer choice)? ▪ Who will conduct quality control, and who will incur the cost – seed companies? | <p>Agronomic practices</p> <ul style="list-style-type: none"> ▪ What are the agronomic practices related to WEMA seed (i.e., ideal harvest time, soil, and fertilizer requirements and mechanization process)? ▪ How will farmers be educated about isolation areas? |

Citation

Social Audit Report for the Water Efficient Maize for Africa Project, 2011. Ethical, Social, Cultural, and Commercialization Program, Sandra Rotman Centre. January 2012.



AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION
FONDATION AFRICAINE POUR LES TECHNOLOGIES AGRICOLES

AATF Response to Ethical, Social, Cultural and Commercialization (ESCC) Audit Report 2011 Recommendations

AATF and the WEMA country teams have reviewed the ESCC Audit report 2011 and appreciate the recommendations made. Below please find AATF's responses to the specific recommendations made.

A) PROJECT RESPONSE TO ESCC KEY FINDINGS

I. Overall ESCC evaluation of the WEMA project remains good.

Response: The project has noted and appreciates the consistent average ratings of good from 2009 to 2011. As the project winds up the first phase it will continue to engage with partners and stakeholders to develop and implement a phase two strategy that will ensure delivery of drought tolerant maize.

II. Collaborations have improved, and can continue to improve WEMA communications

Response: WEMA is committed to ensuring that this Public-Private-Partnership venture is a success and, therefore, continues to take advantage of the various communication platforms provided by different partners to deliver information to stakeholders. WEMA will continue to work together with the various stakeholders to strengthen the communication reach, and widen it as appropriate to support project progress.

III. WEMA Communication can continue to improve on delivering tailored information to a wider range of stakeholder groups

Response: The project recognizes that managing stakeholder expectations is key to the success of the project and therefore endeavors to ensure that communication around the project is in line with and supports project progress.

Different stakeholders have different information needs and the project will continue to engage them at various times and through different channels, such as meetings with communities around the CFT sites and through national and regional stakeholder meetings. The project also

realizes that engagement with the media is vital in reaching their network of stakeholders and will continue this engagement.

In its 2012 plan, the project will give more emphasis on communication related to WEMA conventional bred varieties, as the first varieties are expected to be deployed around 2014 in Kenya.

IV. WEMA's deployment plan is unclear to many stakeholders

Response: The Project notes the great interest shown by stakeholders in the realization of WEMA goals especially as it enters its second phase that will include deployment. WEMA project is currently in its fourth year of operation and will enter phase two in 2013. Deployment is scheduled to take place in phase two and in preparation for this phase; the project formed its Deployment Team in 2011 that is currently working on a deployment strategy to guide the project's product delivery activities. The communication team will work closely with the deployment team to support stakeholder engagement and information sharing that will enhance understanding of the Project's activities related to deployment. The Project recognizes the importance of commercialization and has commenced engagement with various key players and will continue this effort to ensure participation by relevant stakeholders so WEMA seed reaches farmers.

V. Clarity is needed on the performance of WEMA technologies

Response: The project notes with gratitude stakeholders interest and appreciation. The project is keen to remain transparent on all its activities and it will continue updating stakeholders on decisions and actions taken including providing clarification on issues of interest. We note most of the issues raised are in the FAQ and on the WEMA website but the project will seek to improve on this and other documents to ensure better understanding by stakeholders. As the project nears deployment, farmer education and awareness will also be taken as critical and will engage seed companies and extension workers in capacity strengthening to ensure they have adequate information on the technology and learn about the best management practices.

VI. Positive interactions among WEMA partners are valuable to the project

Response: The project is aware that positive interactions within the partnership are vital to its overall success and notes that its efforts in this area were rated 'good' to 'very good' by partners. It will continue efforts to enhance interactions within the project. The use of NARS germplasm in the project as well as the inclusion of NARS in the OPSCOM are some of the initiatives that have enhanced these interactions. As the project moves into the second phase of operations, other ways to strengthen this interaction will be explored.

B) PROJECT RESPONSE TO COUNTRY SPECIFIC KEY FINDINGS:

Mozambique:

WEMA should be cognizant of the unique context for deployment in Mozambique

Response: The seed system is crucial for the deployment stage and the WEMA project office is committed to and continues to build the capacity of staff to address this matter in time for the deployment stage. Deliberate efforts are being made to engage with seed companies and regulators in Mozambique and all other WEMA countries.

Required revision to the biosafety law in Mozambique has delayed WEMA trials

Response: The WEMA regulatory and intellectual property teams have been working closely with the WEMA Mozambique team in ensuring the project operates within the country's accepted laws and regulations. In addition, WEMA has encouraged the Mozambique team to identify additional sources of expertise such as the Africa Biosafety Network of Experts (ABNE) established by the Africa Union (AU) / the New Partnership for Africa's Development (NEPAD) office of Science and Technology, for guidance as they continue to develop their regulatory frameworks. Their efforts to engage appropriate stakeholders are vital in developing a positive legal environment which will support the goals of this project for Mozambique.

Communication could be enhanced within and among project teams in Mozambique:

Response: Communication within and across teams is critical in a project such as WEMA that depends on team performance and contribution. Thus, communication is encouraged across all teams by the project and necessary steps towards enhancing it continue to be taken proactively.

South Africa:

Better understanding of the anti – GMO concerns in Lutzville, South Africa is needed

Response: WEMA has been involved in various activities with different stakeholders to raise awareness of the project goals. In Lutzville, WEMA has continued to engage the community with factual information on its activities especially around the CFT site. Following a successful community stakeholder meeting held in 2010 that involved discussions with the community, it was determined that the community issues were driven by the larger land issues in South Africa. The project went ahead and identified other agricultural endeavors that it can provide support in and is helping the community with as part of its revised communications strategy.

Tanzania:

Lack of communication expertise in Tanzania weakens WEMA's ability to address stakeholder concerns

Response: The Tanzania team has recognized this challenge and had since taken a corrective action by appointing a communications specialist to replace the previous team member. It must however be noted that in the spirit of teamwork, the Tanzania team did manage to carry out a number of key activities around communications during the year that enhanced awareness of its conventional drought tolerance work. However, the ESCC survey is not clear on the stakeholder concerns that were not addressed by the other members of the Tanzania team

who worked diligently to discuss the project with many stakeholders and address their concerns throughout the year.

The regulatory capacity to handle WEMA transgenic materials can continue to be enhanced in Tanzania

Response: The project appreciates that capacity building is an ongoing process and will continue to work closely with the Tanzania counterparts to ensure that they can fully handle biosafety concerns that can impact deployment of transgenic materials. In addition, it should be noted that there are other sources of expertise to enhance regulatory capacity such as ABNE

Concerns exist about reduced WEMA activity in Tanzania due to delayed revision of the biosafety strict liability clause

Response: The project is hopeful that the biosafety laws in the country will be reviewed to provide a positive environment for Tanzania to proceed into the CFTs for its transgenic drought tolerant maize. In the meantime, Tanzania continues to work on conventional drought tolerant maize with encouraging results, receiving full support of the project.

Uganda:

Delay in Uganda to enact the biosafety law allowing commercialization may hinder progress of the project

Response: The project work in Uganda is well on course with the Ugandan team having successfully conducted several CFTs. The project continues to engage different government departments, institutions, and stakeholders and to update them on the project and answer questions as necessary.

C) PROJECT RESPONSE TO ESCC RECOMMENDATIONS:

ESCC Recommendation I: Increased collaborations have contributed to improvements in WEMA communications in the past years. Continued efforts to collaborate with existing stakeholder groups and institutions will be beneficial for acquiring intermediaries for wider stakeholder reach and improved public awareness of WEMA technologies.

Dissemination of information to a wider range of stakeholders should be tailored to stakeholder groups' specific needs and concerns with the project, and cognizant of their language, education, and interests. For example, understanding the underlying issues of opposition to CFTs, by each stakeholder group in Lutzville, South Africa, (farmers, community groups, and anti-GM activists), including crop preferences, access to land, and the role of Monsanto in the project, can inform WEMA communications of how to respond accordingly to each group's point of contention.

Providing quality information to collaborative intermediaries (such as WEMA champions and NGOs involved in agricultural biotechnology communication) through ongoing training and evaluation, and continuing successful communication efforts with internal stakeholders to

reach external stakeholders (i.e., farmers, farmers' associations, policy makers, millers, and extension services) will also be beneficial for awareness creation WEMA technologies.

Project Response: The project appreciates the recommendations above and notes that most of them such as interactions with communities in Lutzville South Africa and other external stakeholders (policy makers and farmer associations) in different countries are ongoing and will continue to be strengthened as the project progresses.

We must note that after extensive communication with community leaders in Lutzville, the protests were driven by the larger land issues in South Africa outside the scope of the WEMA project.

ESCC Recommendation II: WEMA stakeholders require more information on the performance of WEMA technologies. (See Appendix 2 for specific questions.) Although WEMA has made progress in this area, particularly through the publicly accessible FAQ Web page on the WEMA Web site, questions remain regarding adaptability, expected yields, trait stacking, and required agronomic practices. We recommend that WEMA provide answers to stakeholders' questions listed in Appendix 2, and make clear to stakeholders that WEMA involves both conventional and transgenic technologies.

Project Response: The project is still conducting research to develop products that are well suited to the African environment. As the project advances, more information on potential products will be made available. The WEMA project is transparent in all its communication that the project involves both conventional and transgenic technologies. This, together with other information, is necessary to ensure understanding of the project by stakeholders, and will continue to be enhanced. As WEMA phase two commences, the project will continue to engage stakeholders and meet their different information needs. The project will also enhance its information sharing system to ensure better clarity.

ESCC Recommendation III: WEMA should expedite efforts to establish a communications lead and team to execute the WEMA communications strategy in Tanzania. Effective engagement about WEMA is needed among policy makers and at the grassroots level for awareness of the technologies, and to alleviate stakeholders' concerns.

Project Response: The Tanzania team has appointed a communications specialist to replace the previous team member. It must, however, be noted that in the spirit of teamwork, the Tanzania team did manage to carry out a number of key activities around communications during the year that enhanced awareness of its conventional drought tolerance work.

ESCC Recommendation IV: Greater information sharing among project teams regarding WEMA activities, product development in particular is needed in Mozambique.

Project Response: We agree; communication within and across teams is critical in a project such as WEMA that depends on team performance and contribution. Thus, communication is

encouraged across all teams by the project and necessary steps towards enhancing it will continue to be taken.

ESCC Recommendation V: We recommend that the WEMA project provide greater engagement and attention to the concerns of seed companies, NGOs, National Agricultural Extension Services around issues of deployment. (See Appendix 2 for specific questions by these stakeholder groups.) Clarity is needed about how seed companies will be involved in seed distribution, how WEMA technologies will reach the farmers, and how WEMA activities will be sustained beyond 2017. We recommend that WEMA partners provide responses to stakeholder questions outlined in Appendix 2.

Project Response: This is noted; and during 2011, the project commenced working on the phase two strategy which will address deployment, performance, sustainability and other comments, such as seed company involvement and farmer outreach.

ESCC Recommendation VI: The WEMA project has made an effort to join in the development of the biosafety law in Mozambique. We recommend enhancing engagement of the WEMA project team in Mozambique for improved understanding of the need for review of the biosafety laws so the partners in the country can proceed in tandem with others in the process.

Project Response: The WEMA regulatory and intellectual property teams have been working closely with the WEMA Mozambique team in ensuring the project operates within the country's accepted laws and regulations. The ESCC team needs to clarify whether by use of the word join above they mean participate.

ESCC Recommendation VII: We recommend continuous engagement of government and non-government stakeholders in Tanzania to ensure a review process of the strict liability clause in the biosafety framework, to allow for continued transgenic activities in the country. We also recommend engagement of farmers regarding WEMA conventional varieties, for continued awareness of WEMA technologies. Enhancing regulatory training to continue building local capacity to address biosafety concerns and WEMA transgenic technologies will support regulatory efforts in the country, as well.

Project Response: The project respects each country's decisions on management of transgenic work and will operate within the country's accepted guidelines. In Tanzania, the project continues to provide necessary information to relevant stakeholders as they consider what needs to be done with regards to review of the regulations. Capacity strengthening of the WEMA team will continue to be carried out to support project activities and in the long run, build each country's internal capacities and understanding of country regulations.

ESCC Recommendation VIII: WEMA is leading project that has raised the bar high with respect to product efficacy and timeliness for delivery. Continued involvement of all WEMA partners and continuous availability and access of information to all stakeholders particularly on the progress of WEMA activities will be important for maintaining high regard for the project.

Project Response: The project is aware that positive interactions within the partnership are vital to its overall success and notes with satisfaction that its efforts in this area were rated 'good' to 'very good' by partners. It will continue efforts to enhance interactions within the project. The use of NARS germplasm in the project as well as the inclusion of NARS in OPSCOM in response to ESCC's previous recommendations, are some of the initiatives that have enhanced these interactions. As the project moves into the second phase of operations, other ways to strengthen this interaction will be explored. In addition, the project will continue to share information on developments and progress with key stakeholders as appropriate.