Sasakawa Africa Association
and Sasakawa Africa Fund for Extension Education

ANNUAL REPORT
2011 & 2012

“Feeding the Future”
The agricultural projects of the Sasakawa Africa Association (SAA) are operated as joint ventures of two organizations – SAA and the Global 2000 Program of the Carter Center in Atlanta, Georgia (USA). There are currently four Sasakawa-Global 2000 (SG 2000) country projects – in Ethiopia, Mali, Nigeria and Uganda – for which SAA serves as the lead management organization. Former US President Jimmy Carter and his advisors work through the Global 2000 Program to provide policy advice to national political leaders in support of SG 2000 project objectives. Funding for SG 2000 projects comes principally from The Nippon Foundation of Japan, whose Chairman is Yohei Sasakawa and whose President is Takeji Ogata.

SAA relies on the Sasakawa Africa Fund for Extension Education (SAFE) – a legally separate organization also funded by The Nippon Foundation – to provide leadership for building human resource capacity in agricultural extension. These two organizations share a common Board of Directors and work together to harmonize and implement their highly complementary agendas.

**SAA Board of Directors**
(as of December 2012)
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**SAA Founders**
- Mr Ryoichi Sasakawa
- Dr Norman E. Borlaug
- President Jimmy Carter

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- Masaaki Miyamoto, Japan, Executive Director
- Juliana Rwelamira, Tanzania, SAFE Managing Director

**Senior Staff**
- Andreas Oswald, Germany, Thematic Director, Crop Productivity Enhancement
- Leonides Halos-Kim, Philippines, Thematic Director, Postharvest Handling and Agroprocessing
- Justine Wangila, Kenya, Thematic Director, Monitoring, Evaluation, Learning and Sharing
- Abou Berthe, Mali Country Director
- Aberra Debelo, Ethiopia Country Director
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**SAFE Associate Staff from Winrock International**
- Roseline Nyamutale, Uganda Country Director
- Robert Anyang, Regional Program Officer, PPP and Market Access
- Rose Wanzie, Regional Program Officer, Postharvest Handling and Agroprocessing
- Shushe Negussie, Regional Administrative Manager, Ethiopia
- Asnakech Sisay, Regional Financial Officer, Ethiopia
- Maki Seki, Program Officer, Japan
- Rayako Tokusue, Program Officer, Japan
- Chizuru Nakamoto, Assistant Program Officer, Japan

**SAFE Founder’s Staff from Winrock International**
- Dr Norman E. Borlaug, President of Winrock International

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**SAFE**

**Founders**

- Dr Norman E. Borlaug
- President Jimmy Carter
I am pleased to have this opportunity to introduce our Annual Report, incorporating our activities for two years, 2011 and 2012. We decided to amalgamate these reports because they covered the development, and first year of implementation, of our Strategic Plan, 2012-2016. It therefore seemed a logical step to take at such an important period in the history of our two organizations, the Sasakawa Africa Association (SAA) and the Sasakawa Africa Fund for Extension Education (SAFE).

This has been a defining moment for our organizations. As reported in our 2010 report, we had already restructured our organizational vision, mission and goals. We brought in new staff members, mostly from Africa and also enhanced our gender balance with some 40 percent now being female. I was proud that these changes were made in my first year of assuming the Chair.

But we had a new and decisive step to take – to develop a road map to generate greater trust, support and impact from our work as part of a Strategic Plan to cover the next five years, building on the past legacy of the organization. The basic wish of our founding fathers would always remain – to improve productivity in staple food crops for Africa’s smallholder farmers in order to address hunger and food insecurity. Over the years, through the Sasakawa-Global 2000 (SG 2000) country projects, thousands of frontline extension staff and several million farmers across 14 African countries have been reached. They tested higher-yielding technology for maize, wheat, rice, grain legumes, and roots and tubers developed by African national research organizations, in collaboration with the international agricultural research centers. It was a 25 year odyssey – driven by the indefatigable spirit and energy of Dr Norman Borlaug, the political skills of President Jimmy Carter, and the generosity of The Nippon Foundation, virtually our sole donor, with the unfailing support of the Foundation’s Chairman, Mr Yohei Sasakawa.

The changes that we decided to make, to be incorporated into our Strategic Plan, were driven partly by the new and different environment in which we now worked. We decided to shift resources into helping the very poor subsistence farmers, particularly women farmers, who did not have the physical assets to generate a reasonable livelihood. Those with adequate health and education must be assisted, we agreed, to move partly out of farming and participate more fully in rural labour markets. We further decided to support these groups establish viable agroprocessing enterprises, thereby becoming an invaluable part of the value chain, with productivity and quality improvements in crop production, processing and marketing.

Over the years, small-scale farmers had become increasingly aware of the importance of the value chain. It was not enough to adopt productivity-enhancing technology, even if inputs were available. To progress, farmers needed to capture more of the value addition that existed higher up the value chain. To accomplish this, viable farmer-based organizations needed to be created that would address postharvest and marketing issues while engaging a wider range of service providers and organizations, including the private sector.

Bringing a smallholder perspective to smallholder agriculture also required a major capacity building effort to broaden the skills of frontline extension personnel. Very poor farmers – often women – are usually excluded from mainstream extension programs. Far too often they are left to toil on their own. This had to change.

To this effort, we could add the lessons learned from SAFE, which has been described as our most significant contribution to institutional capacity building since its launch at the University of Cape Coast, Ghana, nearly 20 years ago. But even SAFE cannot stand still – and new value chain-oriented curricula needed to be developed and launched at participating universities.

On the evidence of the changing world for Africa’s smallholder farmers – emphasising our need to embrace change – the Strategic Plan, covering the next five years of our operations, was conceived. It was developed through a consultative and participatory process within and outside the organization. Stakeholders, partners and SAFE personnel contributed and voiced their opinions about future directions, options and opportunities. We set out what we expected to achieve and the resources we would need to accomplish our goals.
I end on a sad note – the death of Chris Dowswell, who helped to create the vision and Plan and saw the Plan’s adoption by the board in Bamako in November 2011 before his untimely death that very month. It is impossible to evaluate his extraordinary contribution. We still miss him dearly.

The Plan, to be further described in the pages of this Annual Report, is our enduring tribute to Chris, as he will always be known to us.

Hon Professor Ruth K Oniang’o
Chair of the Sasakawa Africa Association
Chair of the Board of the Sasakawa Africa Fund for Extension Education
Nairobi

Professor Oniang’o has had a distinguished career as a teacher, development leader and parliamentarian. She was a Professor of Food Science and Nutrition at Jomo Kenyatta University of Agriculture in Nairobi. She is founder and editor of the African Journal of Food, Agriculture, Nutrition and Development and leader of the Rural Outreach Program, a Kenya-based NGO that supports resource-poor farmers in production and agroprocessing at the community level. She has served on various international boards, such as the International Fertilizer Development Center (IFDC), the International Rice Research Institute (IRRI), and the Australian Centre of International Agricultural Research (ACIAR). She served on advisory committees of the International Food Research Institute (IFPRI), the HarvestPlus Initiative, the Bill and Melinda Gates Foundation (BMGF), and the University of Leeds Africa College Initiative. She was a member of the Kenyan Government’s thematic group for food security and nutrition. She has received her BSc and MSc from Washington State University in the USA and her PhD from the University of Nairobi.
Over the two years, 2011 and 2012, SAA completed its transformation from a highly decentralized smallholder development organization with one donor, and few formal mechanisms to measure accountability, towards a more structured, multi-donor organization with clearer impact targets and mechanisms to measure progress.

The restructuring has made SAA more dynamic, competitive and accountable. Better program planning and implementation, tied to logframes with clearer milestones and deliverables, are increasingly the norm. New and better financial management approaches have been put in place and the budgeting process has improved tremendously. A staff performance evaluation system has been set up to guide staff salary increments based on performance.

At a thematic area level, Crop Productivity Enhancement (CPE), Postharvest and Agroprocessing (PHAP), Public-Private Partnerships and Market Access (PPP/MA) and Monitoring, Evaluation, Learning and Sharing (MELS), all finalized recruitment of their team members in the four focus countries, in close collaboration with the Country Directors. In Ethiopia, more program officers were recruited (compared to other countries) in view of a large number of projects and because of the intensity of work from a Bill & Melinda Gates Foundation (BMGF) funded project. By the end of January 2012, all themes had finalized their Concepts and Procedures documents to guide their teams in the countries and conducted planning meetings to internalize the procedures.

Much work, however, still needs to be done to build staff capacity, with problems remaining in the areas of quality and performance. While the matrix management approach is better understood by SAA and SAFE staff, through training and re-training, the recruitment of new staff makes this a continuous process. Similarly more effort needs to be made on improving consultation and feedback between Thematic Directors (TDs) and Country Directors (CDs). The analogue of architect and contractor has often been used to clarify the responsibilities of the TDs and CDs.

Strategic Planning

SAA’s Strategic Planning exercise began in 2008 when negotiations were first held with BMGF for a major joint program. As part of that process, BMGF awarded SAA a US $400,000 planning grant. With this grant, and SAA core funding, extensive and multiple discussions were held with stakeholders in all four focus countries, as well as SAA staff. Since BMGF was to be a significant investor in this project, they requested KPMG to conduct a due diligence review of SAA management and BMGF retained several consultants to assist with project development.

Out of this process – and SAA board meetings in 2009 and 2010 – came the new SAA organization and structure made up of five thematic program areas and adopting a matrix system of management.

On the basis of this structure, and with the full contribution of our staff, our strategic plan was developed – with staff ownership of the plan further captured at a Strategic Planning Retreat in Addis Ababa in May 2011.

The new SAA vision, mission and strategic goals are summarized in Box 1 (overleaf) by private sector entities, NGOs, and farmers’ organizations.
SAA Vision
A more food-secure rural Africa with increasing numbers of prospering smallholder commercial farmers.

SAA Mission
To transform African extension advisory services in partner countries to assure greater family food security, and more profitable participation in commercial activities along the value chain, while respecting natural resources.

SAA Strategic Goals
1. Establish cost-effective Farmer Learning Platforms that improve productivity in smallholder food systems, especially for resource-poor women farmers and those with low levels of technical efficiency, and increase food security and livelihoods.
2. Enable smallholder farmers to capture a larger proportion of the economic benefits inherent in agricultural food value chains.
3. Create Public-Private Partnerships that financially support delivery of extension services for enhanced smallholder agricultural development and enhance profitable market access.
4. Strengthen agricultural extension systems by building capacity of extension professionals and smallholder farmers to accelerate agricultural productivity and credit more competitive value chains.
5. Establish information and knowledge management information systems that enable adaptation, modification and change of technologies and approaches, improve efficiency and impacts, and communicate lessons and best practices for timely evidence-based decision-making.

SAA has designed a twin track anti-hunger/anti-poverty smallholder development strategy and a set of program interventions that go across a much broader spectrum of the value chain. Our “anti-hunger” work is directed primarily at smallholder farmers historically underserved by extension, half of whom are women, and most of whom are ‘net food buyers’ during the year, by which we mean they do not produce enough to meet their family food needs and though they are likely to trade small amounts of their produce, they buy more food than they sell or just go hungry. These are the smallholders whose primary concern is food security. Those targeted in the “anti-poverty” work either are ‘net food sellers’ already or they have the potential of becoming so. These are the commercially-oriented smallholders whom we are targeting for support.

On resource allocation, we intend to spend roughly equal amounts on our two objectives of food security and smallholder commercial development. Under Theme 1 (Crop Productivity Enhancement), food security is our priority goal, with Theme 2 focusing on household grain storage protection and off-farm agroprocessing enterprise development for resource-poor farmers, mainly women.

The “smallholder development” component of the strategy includes Theme 2 and Theme 3 (Promoting Public-Private Partnerships), where farmers are mobilized and supported to produce efficiently for the commercial market place, meeting quality standards, contractual agreements, and being sensitive to market price signals. Target farmers are primarily ‘net food sellers’ who work in farmer-based organizations to access other market players.

Once our program and management systems are fully in place and we are satisfied with the outcome (hopefully by mid-term of the plan), it is likely that we will expand our focus to include a fuller range of agricultural enterprises, particularly those that offer higher value to smallholder farmers.

Putting the SAA Strategic Plan into practice was our main objective for the year 2012.

Senior staff recruitment
Staff recruitment in the two years under review reflects the new SAA priorities.

Dr Roselline Nyamutale began work as Country Director for Uganda in February 2011. A veterinarian by training, she has considerable experience in leading rural development projects. She adds to SAA’s technical strength in livestock as we broaden our activities from crop to broader areas of agricultural productivity, where poultry and livestock improvement is promoted.

We have not yet recruited a Thematic Director for Theme 3 (Public Private Partnerships), a portfolio held by me since 2011. However, Robert Anyang, Theme 3’s Regional Program Officer, is sharing the workload from Uganda. He was hired in August 2011. During 2012, Management decided to decentralize the management of Theme 3, due to the fact that, unlike other themes, T3 is very site-specific in program development. T3 is about building partnerships and making deals, and that requires language and cultural depth and proficiency. So it was decided to strengthen the two countries that don’t have deputy country directors (DCD) in Mali and Nigeria. The CD-DCD teams can direct the T3 staff. Thus, it is felt that a TD is probably not necessary.

Dr Habtu Asefa started with us in February 2011 as the SG 2000-Ethiopia Deputy Country Director and Project Coordinator for the BMGF-funded “Strengthening Agricultural Extension Project”.

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**Rose Wanzie** was hired as regional staff member for Theme 2 (Postharvest & Agroprocessing). She has extensive experience in postharvest handling of cereal grains. She is working from the Uganda office.

**Dr Senayt Yetneberk**, SAA Program Officer and Project Coordinator for the JICA-funded Women Processors’ Cooperatives Project, joined SG 2000-Ethiopia in November 2010. Kazuya Inui joined in June 2011 as Project Coordinator for the JICA-funded Tigray Smallholder Farmers’ Diversification Project. He is assisted by Abera Gebreamlak, SAA Program Officer, who joined in July 2011. Seven program officers have been recruited for the BMGF project – and a further three for the JICA projects.

In Tokyo, **Chizu Nakamoto** joined the Tokyo office as a Program Officer.

Recognizing the increasingly competitive marketplace for staff in Africa (as Uganda in particular has shown), SAA is developing a strong staff development program. In November 2011, the SAA Board approved the creation of a $50,000 fund – the Borlaug Fund for Staff Professional Improvement – in support of staff motivation in the form of study and qualifications in areas of relevance to their professional careers.

Finally, SAA’s Management Information System has taken root in the organization – not least for the sharing of information by internal accountants – thereby increasing the speed and accuracy of essential management information.

**Resource mobilization**

As indicated in the Strategic Plan, SAA has enjoyed the strong support of The Nippon Foundation, Japan’s largest philanthropic organization, since its inception. Such long-term support is a rarity and has enabled SAA to focus on program implementation with consistency. Thus, funding levels have been relatively constant in recent years, which has limited the capacity of SAA and SAFE to scale up their work.

However, with the new partnership with BMGF and the challenges of new targets identified by the Strategic Plan, SAA has been successful in diversifying its funding sources, thereby increasing its annual budgets by 50 percent.

Apart from The Nippon Foundation, SAA receives funding from the Alliance for a Green Revolution in Africa (AGRA) as well as BMGF. The Japan International Cooperation Agency (JICA) is supporting two SAA projects, as well as the World Food Programme Purchase for Progress initiative (P4P), and Canadian International Development Agency (CIDA) in Ethiopia. SAA-SG 2000-Nigeria has participated in the USAID-MARKETS I and II Project. Also in Nigeria, four states – Adamawa, Bauchi, Zamfara and Jigawa – signed agreements with SAA to provide additional support outside the SAA-SG 2000 Nigeria program. However, Bauchi is yet to release the promised funds to SAA-SG 2000 Nigeria. Meanwhile, in 2012, discussions continued with Nigeria’s Federal Ministry of Agriculture and Rural Development for a major nationwide expansion of the Sasakawa program.

Collaboration with multilateral donors developed with the World Food Programme P4P in Ethiopia, Mali and Uganda, and with the International Fund for Agricultural Development (IFAD) as part of the Millet and Sorghum Initiative (Phase II). In 2012, SG 2000-Mali implemented a smallholder agriculture emergency project funded by the Dutch Embassy in that country.

Areas of concern, over which we have no control, emerged in 2012 with the deteriorating political and security situation in Mali and outbreaks of terrorism in northern Nigeria. Obviously our first priority must always be the protection and wellbeing of our staff. However, our programs in both these countries have continued with success though, inevitably, some of our fieldwork has been suspended in areas judged to be a risk to staff.

**Juliana Rwelamira**  
*Managing Director*

**Juliana Rwelamira** writes: “the sudden and unexpected death of Chris Dowswell in November 2011 shook the entire organization to its core. Chris was an inspirational figure for us and there was not a member of staff who was not deeply touched by his passing. There was only one response we could make – to resolve to work harder and ensure that Chris’ efforts towards improving the livelihoods of Africa’s smallholder farmers were not in vain. We are determined to reach the objectives we set with him”.

The late Chris Dowswell, Executive Director of the Sasakawa Africa Association, with the former President of Mozambique, Joaquim Chissano, at the Borlaug Symposium, July 2010, in Addis Ababa.
In 2011 the Crop Productivity Enhancement (CPE) team implemented the intensified Farmer Learning Platform (FLP) approach for the first time. After testing our field demonstrations – Technology Option Plots (TOPs) and Women Assisted Demonstrations (WADs) – for their effectiveness during 2009 and 2010, we intensified capacity building activities with extension agents and farmers.

Extension agents participated in at least three Learning and Training Sessions with CPE staff. With that background they were better equipped to train farmers and initiate the diffusion of improved technologies and agricultural practices. This approach is more resource and time demanding than only having field demonstrations but strengthens the development of new skills and acquisition of knowledge among extension agents and farmers. An enhanced understanding of basic and more advanced technologies and practices, allied to a better comprehension of the agro-ecological system in which they operate, will help farmers make the right decisions to improve productivity and yields on their farms.

Our capacity development concept is therefore the single most important factor for a sustainable development process. This shift in focus not only meant a new orientation for the CPE team but also for the extension agents. Field demonstrations became learning sites and were not an end in themselves. A healthy crop in the demonstration fields does not necessarily imply that SAA or the extension agents have done a good job; this is measured by farmers adopting and benefiting from technologies and being knowledgeable enough to adapt them to their conditions. That is why we are moving away from strict recommendations of fertilizer rates or planting densities to explaining the principles of technologies, so that farmers do not just copy but understand and are able to respond to changing environmental and economic conditions.

Capacity building activities have been greatly enhanced. About 1,500 extension agents and other officers have been trained, who in turn trained about 31,000 farmers, and more than 3,300 demonstration plots have been implemented in four countries, the majority of them addressing women farmers (Table 1). The extension agents worked with almost 18,000 early adopters, farmers who tested a technology introduced by SAA on their own fields, at their own expense. The extension agents also initiated and participated in 270 Farmers’ Field Days with about 27,000 visitors.

Based on these experiences the CPE team participated in the development of SAA’s new Strategic Plan 2012-2016. The plan recognized the new approach and the Farmer Learning Platforms as the central element of SAA’s extension methodology. Furthermore, it set ambitious goals for the CPE team over its five year period. If resources permit, the team should begin impacting on 400,000 farm families, the majority of which are subsistence small-holder farmers who are food insecure during several months of the year. However, increased productivity should lead not only to food security but also enable farmers to access markets with their produce in order to generate income. Therefore the CPE activities are the starting point for the value chain approach following the logic that improved farm productivity leads to surplus production, to which storage and processing add value before entering the market place, meeting customer demand and fetching better prices.

New projects were launched and the number of farmers involved in ongoing projects gradually increased in 2012 as CPE activities were greatly enhanced. The CPE team implemented almost 4,000 field demonstrations and trained about 1,600 extension agents and other officers.

### Table 1: CPE – Farmer Learning Platforms in 2011 and 2012

<table>
<thead>
<tr>
<th>Crops</th>
<th>maize, sorghum, wheat, millet, rice, barley, tef, soybean, bean, peanut, cowpea, sesame, yam, cassava, sweetpotato, potato, vegetables.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technologies</td>
<td>varieties, fertilizer: micro dose, fertilizer types and application, planting density, line planting, zero tillage, pest and disease control, herbicides, intercropping, quality seed, soil and water conservation, legume inoculants.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAs</td>
<td>953</td>
<td>1,276</td>
</tr>
<tr>
<td>Other officials</td>
<td>492</td>
<td>321</td>
</tr>
<tr>
<td>Farmers</td>
<td>31,200</td>
<td>51,200</td>
</tr>
<tr>
<td>Field demonstrations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOP</td>
<td>947</td>
<td>922</td>
</tr>
<tr>
<td>WAD</td>
<td>2,308</td>
<td>2,829</td>
</tr>
<tr>
<td>CVP</td>
<td>114</td>
<td>167</td>
</tr>
<tr>
<td>Early Adopters</td>
<td>17,902</td>
<td>32,532</td>
</tr>
<tr>
<td>FIELD DAYS</td>
<td>269</td>
<td>267</td>
</tr>
<tr>
<td>Visitors</td>
<td>26,724</td>
<td>59,097</td>
</tr>
</tbody>
</table>
The extension agents then trained more than 51,000 farmers and interested about 32,000 early adopters in newly introduced technologies. We also tested a novel field demonstration, the Community Variety Plot (CVP). This demonstration is often managed by extension agents and shows several new varieties of new and known crops to the farmers. The concept was well received as farmers could compare for the first time, for example, different varieties of maize or peanut and then make their choice for the new season. Likewise we received support from private seed companies who seized the opportunity not only to show their new varieties to farmers but also to collect their feedback, getting a better idea of characteristics which are important to farmers and those which are not desired. In the future we will include the CVP in our FLPs that are supporting the diffusion of improved varieties and quality seed.

The focus of the CPE team has gradually shifted from field demonstrations to capacity building and monitoring of the extension agents’ job in providing services to farmers. In the next step we need to better understand and follow up with early adopters, involving them in training activities and having extension agents visit them at their farms frequently. The CPE team, together with extension agents, collected information on early adopters (Table 2).

For further in-depth analysis we will need the support and collaboration of SAA’s Monitoring, Evaluation, Learning and Sharing Unit. There is a need to evaluate and verify our extension model and identify the best options in order to maintain efficiency and effectiveness to be able to scale-up sustainably the implementation of improved technologies.

In 2011 and 2012, SAA actively applied for several development projects in the four target countries. To implement these activities the CPE team recruited new staff and grew from eight to a team of 15 Thematic Coordinators and Program Officers. Although manpower almost doubled, problems remained in completing all the additional tasks while maintaining our standard and quality of work. In order to meet the targets set by the Strategic Plan we will have to increase our work force even further. An additional challenge was, and will be, the incorporation of new areas of operation, which are often requested from us by the national agricultural extension services and donor funded projects, such as livestock, bee keeping or vegetable and fodder production. In this respect we will have some interesting and challenging years ahead trying to expand our services helping African farmers to improve their livelihood conditions.

<table>
<thead>
<tr>
<th>Crop/Technology</th>
<th>Rice</th>
<th>Maize</th>
<th>Groundnuts</th>
<th>Soybean</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely planting</td>
<td>121</td>
<td>230</td>
<td>44</td>
<td>47</td>
<td>442</td>
</tr>
<tr>
<td>Proper spacing</td>
<td>78</td>
<td>71</td>
<td>77</td>
<td>28</td>
<td>254</td>
</tr>
<tr>
<td>Timely weeding</td>
<td>26</td>
<td>50</td>
<td>89</td>
<td>63</td>
<td>228</td>
</tr>
<tr>
<td>Postharvest handling</td>
<td>23</td>
<td>69</td>
<td>23</td>
<td>63</td>
<td>178</td>
</tr>
<tr>
<td>Fertilizer use and application</td>
<td>112</td>
<td>1010</td>
<td>130</td>
<td>164</td>
<td>1416</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>360</td>
<td>1430</td>
<td>365</td>
<td>365</td>
<td>2518</td>
</tr>
</tbody>
</table>
Theme 2 addresses improvement of postharvest handling and the agroprocessing (PHAP) sub-sector of the value chain. In all SAA focus countries, crop postharvest management is seen as a promising agricultural growth sector for job creation, income generation and ensuring food security. The big challenge is getting farmers and processors to be competitive with high quality and high value-added products to meet market requirements.

In line with SAA’s new Strategic Plan, Theme 2 aims to increase productivity by reducing postharvest handling and storage losses, thereby increasing food availability and raising income through value addition activities. This is achieved principally by improving farmers’ knowledge and making technologies accessible that enable them to capture the economic benefits of their agricultural activities while contributing to increasing food security.

The PHAP program is promoting improved postharvest handling practices and technologies, along with the necessary skills development training. PHAP also follows up with farmers and processors and aids development of off-farm agroprocessing enterprises.

From 2011 to 2012, Theme 2 activities were carried out by a 17-member team consisting of a Theme Coordinator and Program Officers in each country. A Regional Program Officer was also hired to address postharvest reduction in storage and to assist in program implementation. The country teams occasionally engage consultants and resource persons to give specialized training to partners and staff.

Assessment of the constraints and opportunities in selected intervention areas allowed the team to select technologies with the desired features of simplicity, affordability, replicability and mobility. The technological options are packaged to fit the requirements of the crop value chain being addressed. In most cases, the first intervention to improve postharvest handling is awareness training on the importance of good management to prevent losses occurring in the food chain before technological options for improved process efficiency are recommended.

In 2011 and 2012, grain processing technologies, which include harvesters, threshers/shellers, and cleaners, were promoted. Improvement in field transport and storage facilities at farm level is given high priority by the PHAP teams to arrest postharvest deterioration and losses.

Technologies for other priority crops of commercial value, such as cassava in Nigeria and Uganda, and groundnuts in Mali and Nigeria, were also introduced. In Ethiopia, milk and spice processing technologies were introduced to women’s groups.

**Strengthening extension capacity to provide training**

The establishment of the Postharvest and Extension Learning Platform (PHELP) is a major strategy to facilitate the adoption and scaling up of PHAP technologies. PHELPs serve to demonstrate technological options recommended to improve postharvest handling of the major food crops in the locality, and to demonstrate the feasibility of developing a business enterprise.

The establishment of the PHELPs requires the active involvement of the beneficiaries, particularly the extension agents (EAs), farmers and agroprocessors. The cost of establishing the PHELP is shared with the identified users to instill the notion of ‘ownership’ and ensure a sustainable exit strategy from the supported groups. In all countries, the beneficiaries provided the land and buildings to house the machines as well as labor for related construction. PHAP country programs provided the machines and associated training on their operation and management.

In 2011 to 2012, 100 PHELPs (Ethiopia - 50, Mali - 30, Nigeria - 12, Uganda - 12) were equipped with the required technologies, and EAs were trained on their operation and management. A Management Committee elected by the group members is trained to manage the PHELP. They are supervised initially by trained EAs until the group is able to manage on their own.

In addition to the operation of the PHELPs, field demonstrations and training were conducted by the country teams. They provide easy access to information on improved PHAP technological options.

Private service providers were engaged by the PHAP Theme to accelerate the adoption and scaling-up of improved postharvest handling and storage technologies. They provide important access to technologies to smallholder farmers and processors - the key to improving their operations.
SAA identifies and supports enterprising individuals who had been motivated by field demonstrations and by their experiences in the PHELPs. They are trained on agribusiness management, the operational and maintenance requirements of selected technologies, linked to agromachinery and spare parts dealers and machine shops to assist in their machine maintenance needs. The success of this strategy will depend on the type of technologies and the market opportunities that could be created by the improved process.

The teams reported successful cases where the technologies were purchased by private individuals to improve their operations, and provide agroprocessing services to other producers. The number of service providers in each country is increasing.

Supporting the development of agroprocessing enterprises, particularly for women

The empowerment of women producers through access to important information, training and technologies that save time, improve the quality of their products and increase their income is being carried out by the PHAP program. This has enhanced their confidence to develop their entrepreneurial capacity.

Through a three-year funding from JICA, SAA is supporting women’s groups in Ethiopia to develop sustainable food processing enterprises which emphasizes the promotion of nutrition, hygiene, quality testing, packaging and market promotion activities.

In Nigeria, rice and cassava processing enterprises developed with women groups are now emerging into profitable businesses. In Uganda, one private woman investor purchased a cassava chipping machine to improve her operations and also provide services to processors in her locality.

Sustaining the adoption of technologies

The development of the support system to supply affordable and appropriate technologies, and their associated repair and maintenance services, is still a challenge. SAA works with government and other developmental agencies to facilitate the promotion of improved postharvest systems. New partnerships to adapt and supply technologies have been initiated in 2012. In Ethiopia, SAA now collaborates with MIDI (Metal Industries Development Institute), Asella Agricultural Mechanization Center, Jimma Mechanization Center, and SABG (Selam Awassa Business Group). In Uganda, SAA works with the Uganda Industrial Research Institute (UIRI) and, in Nigeria, with the Agricultural Engineering Department of Bayero University Kano (BUK).

Sharing limited resources among the partners enables the program to assist smallholder farmers and processors in providing the necessary knowledge and hardware to improve their processes.

PHAP will continue to intensify capacity building for extension staff and emerging private service providers to reach more smallholder producers to improve the postharvest handling of their produce. The desired outcome is to see more smallholder producers benefit from their once cumbersome operation of crop production and processing.

Cost/Benefit analysis of garri processing in Nigeria

<table>
<thead>
<tr>
<th>ITEMS OF COSTS</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Annual Fixed Cost</strong></td>
<td></td>
</tr>
<tr>
<td>Initial Investment</td>
<td>5,454.50</td>
</tr>
<tr>
<td>Depreciation on Machines</td>
<td>627.00</td>
</tr>
<tr>
<td>Depreciation on Structure</td>
<td>50.20</td>
</tr>
<tr>
<td>Maintenance and repair charges</td>
<td>40.80</td>
</tr>
<tr>
<td><strong>Total Annual Fixed Cost</strong></td>
<td>718.00</td>
</tr>
<tr>
<td><strong>B Annual Variable Cost</strong></td>
<td></td>
</tr>
<tr>
<td>Raw Material (Cassava at $100/ton)</td>
<td>2,048.30</td>
</tr>
<tr>
<td>Fuel and Oil</td>
<td>39.80</td>
</tr>
<tr>
<td>Firewood</td>
<td>45.40</td>
</tr>
<tr>
<td>Operators Charges</td>
<td>338.90</td>
</tr>
<tr>
<td>Transportation</td>
<td>338.90</td>
</tr>
<tr>
<td>Minor Repairs</td>
<td>9.40</td>
</tr>
<tr>
<td>Labor (Women and Children)</td>
<td>83.40</td>
</tr>
<tr>
<td><strong>Total Annual Variable Cost</strong></td>
<td>2,904.10</td>
</tr>
<tr>
<td><strong>C Annual Cost of Operations (A+B)</strong></td>
<td>3,622.10</td>
</tr>
<tr>
<td><strong>D Annual Quantity of Cassava Processed (Kg) @$100/ton</strong></td>
<td>19,044.00</td>
</tr>
<tr>
<td><strong>E Annual Gross Return from products and services</strong></td>
<td>8,027.30</td>
</tr>
<tr>
<td>Garri</td>
<td>6,288.60</td>
</tr>
<tr>
<td>Starch</td>
<td>1,377.30</td>
</tr>
<tr>
<td>Income from Grating Services</td>
<td>361.40</td>
</tr>
<tr>
<td><strong>F Annual Net Returns (E minus C)</strong></td>
<td>8,027.30</td>
</tr>
<tr>
<td>Return to Total Cost</td>
<td>1.25</td>
</tr>
<tr>
<td>Return to Variable Cost</td>
<td>1.57</td>
</tr>
</tbody>
</table>

Adoption and scaling-up of teff thresher in Ethiopia: SAA introduced a compact multi-crop thresher that processes 500-600kg of teff per hour and is easily transported by donkey cart. By the end of 2011 there were over 250 threshers in Shashemene, southern Ethiopia. Following this success, the Agricultural Transformation Agency of Ethiopia distributed 120 units of threshers to smallholder farmers in 2012.
Both supply and demand incentives played an important role in attracting private sector investment. Agro-input supply firms and business service providers are incentivized by the critical mass of consumers at the community level, well-organized producer organizations and possible tax reductions. On the other side, stable prices, technical expertise, infrastructure, access to credit, improved agro-inputs and land are fundamental incentives to producers. Similarly, long term financing with lower borrowing costs, committed and well organized producers, strategic government investment in specific value chains, rural infrastructure and a supply of energy are the key considerations for investment by private sector processors and buyers.

Theme 3 played a pivotal role in creating opportunities for the private sector to invest with smallholder farmers. Theme 3 activities included developing business and financial models that allow for partnerships to support extension delivery services and access to markets for smallholder farmers as well as models that support Farmer Based Organizations (FBOs) in collective marketing. Business activities were developed to transform agriculture from subsistence farming to commercially competitive agriculture. Also provided were business skills to key players in the agricultural marketing value chain, including traders, managers, village service providers for agronomy, postharvest handling services and input dealers.

Other activities included:

- Identification of service providers who can serve as resource persons or organizations
- Conducting marketing surveys to improve farmers’ access to new markets
- Training input dealers to improve farmers’ access to new technologies and inputs
- Capacity building of financial institutions (formal and informal) to improve service delivery while strengthening the ability of farmers and FBOs to access and efficiently use available financial services
- Creating equitable and mutually profitable business relationships between traders and farmers through producer market alliances that enable traders and farmers to understand their marketing options and improve competitiveness.

Building a win-win partnership with public and private partners to support smallholder farmers

SG 2000 partnered with a number of public and private organizations to support smallholder farmers. In Mali, these included the National Directorate of Agriculture, the Upper Niger River Agricultural Development Authority, the Dutch Embassy, Ardencies and Toguna agrodealers, and the World Food Programme (P4P). In Ethiopia they included the Ministry of Agriculture, the World Bank, the Bill & Melinda Gates Foundation (BMGF), Oxfam America, the World Food Programme (P4P), two seed companies and 14 cooperative unions. SG 2000-Nigeria partnered with Agricultural Development Projects (ADPs) from five states, seven agro-input suppliers, Sterling Bank, USAID’s MARKets program, the National Stored Products Research

Livestock fattening in Aleta Wondo woreda in Ethiopia

<table>
<thead>
<tr>
<th>Theme 3 – Summary of achievements 2011/2012</th>
<th>2011</th>
<th>2012</th>
<th>CUMULATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Business Service Providers trained</td>
<td>190</td>
<td>255</td>
<td>445</td>
</tr>
<tr>
<td>Number of farmers accessing services from BSP</td>
<td>12,005</td>
<td>20,400</td>
<td>32,405</td>
</tr>
<tr>
<td>Number of new Input dealer capacitated in business skills</td>
<td>130</td>
<td>277</td>
<td>407</td>
</tr>
<tr>
<td>Value of inputs sold by input dealers USD</td>
<td>$300,190</td>
<td>$548,410</td>
<td>$848,600</td>
</tr>
<tr>
<td>Number of Commodity Associations supported</td>
<td>560</td>
<td>469</td>
<td>1029</td>
</tr>
<tr>
<td>Number of new Commodity Association trainers</td>
<td>0</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Number of new markets identified</td>
<td>14</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>Number of new business plans developed</td>
<td>10</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Number of new agribusiness models developed</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Number of new farmers accessing profitable markets</td>
<td>22,000</td>
<td>30,580</td>
<td>52,580</td>
</tr>
<tr>
<td>Value of trade by FBOS/CAs $</td>
<td>$1.89 million USD</td>
<td>$1.55 million USD</td>
<td>$3.44 million USD</td>
</tr>
</tbody>
</table>
Bringing inputs and extension services closer to smallholder farmers

Theme 3 and Theme 1 staff provided training to 409 newly established input dealers and traders to take up the role of para-extension workers. As a result of this training, 128 input dealers and 20 traders were able to set up demonstration plots of new technologies, providing front line extension messages to farmers, and selling inputs worth US$648,600 to farmers in Mali, Uganda and Nigeria.

Bridging the gap between farmers and business service providers

SAA supported the formation and subsequent capacity building of Commodity Association Trainers (CATs) who assist in promoting effective and efficient marketing of farm products and provide the services needed by farmers to produce quality products in sufficient quantity. The CATs played the role of Business Service Providers (BSPs). This involved acting as input supplier agents for seed suppliers, commission agents for buyers, and financial agents to link banks with extension agents to deliver extension services.

To ensure sustainability, the CATs charged buyers 5-10 percent commission based on the amount of products or goods they sold or delivered. In addition, SAA strengthened the business skills of 409 input dealers and 445 private BSPs, including licensed store managers, traders, seed companies and processors. Through 2011 and 2012, 32,405 farmers from SAA’s four focus countries received business service provision from 27 CATs and 205 service providers who supplied extension services, threshing and shelling machines, storage services and milling. In 2012, 15,133 farmers accessed credit worth US$440,650 from 18 financial providers.

Accessing profitable markets

Across the focus countries, SAA supported the development of 1,029 commodity associations from 27 FBOs. Theme 3 built their capacity through training and mentoring. This was achieved by developing and implementing 24 business plans and eight agribusiness models that connected 27 FBOs to 32 new market opportunities. The interventions created business opportunities worth US$4.342 million and farmers were able to supply produce worth US$3.44 million to markets. These farmers received a 15-20 percent premium price for their surplus as a result of training support from Theme 1 and Theme 2 to improve their productivity and grain quality. Roughly 52,580 farmers were reached within the Theme 3 catchment of surplus farmers. Theme 3 also provided special capacity building support to 71 women’s groups for business skill development and improving access to finance and markets.

Bee keeping enterprise in Aleta Wondo woreda in Ethiopia
SAFE/THEME 4
SASAKAWA AFRICA FUND FOR EXTENSION EDUCATION

SAFE (Sasakawa Africa Fund for Extension Education) is an independent organization, administered separately from SAA. SAFE currently operates in nine countries, including SAA focus countries. In the SAA focus countries, during the two years under review, four more universities in Ethiopia (Bahir Dar and Mekelle) and Nigeria (Adamawa and Ilorin), launched the BSc program for mid-career extension professionals in the 2011/12 academic year. Mekelle University started ahead of SAFE plans to use its own resources. This is perhaps an important lesson for other universities. Given the huge demand for mid-career extension staff training, universities should be able to launch the program using their own resources the same way they do with other regular programs.

On this basis, four more universities in Ethiopia (Ambo University, Arba Minch University, Jimma University and Wollo University) were approached and encouraged to start the program on their own, and indeed they are preparing to start in 2013.

The new value chain-oriented curriculum was launched at universities in the four SAA focus countries. Where the old curriculum was production-focused, the revised curriculum has a strong component of value addition.

SAFE has continued its involvement in the Bill and Melinda Gates Foundation (BMGF) Ethiopia project. Seventeen Extension Resource Centers (ERCs) were established in 2012 at woreda (district) level and Agricultural Technical and Vocational Education Training (ATVET). All ERCs have internet connectivity to enable Development Agents (DAs) and Subject Matter Specialists (SMSs) to access the latest agricultural information. The website can be accessed through www.sg2000ethiopia.org. More than 50 ERC’s staff (DAs & SMSs) were trained on ICT.

Implementation and training

The write-up of farmer level training modules in Ethiopia on 14 commodity value chains that have been identified through field surveys under the BMGF project started in 2012. A module on soya beans to train farmers is being developed in Uganda. This crop was chosen because it is potentially viable in Uganda. Once the modules are finalized, field level tests will be conducted. DAs/SMSs and subsequently farmers will receive modular based training.

Women mid-career students in Nigeria
Many women professionals find it hard to leave their family responsibilities for extended periods of time on campus. Employers are also reluctant to release staff for long and continuous periods. SAFE is working to find solutions to these limitations by using alternative modes of delivery, such as distance education, sandwich courses, summer and weekend courses, and taking advantage of the growing ICT coverage. To this effect, Makerere University launched distance education in September 2012 and 51 candidates were admitted to the program. All other universities, in Ethiopia, Mali and Uganda, have produced modules in 2012 and are preparing to start distance education.

The intake of students has continued to increase in all of the 11 participating universities and colleges in the four SAA focus countries. The total number of beneficiaries has increased from 1,500 in 2011 to more than 1,800 in 2012. The growing admission at the universities confirms the high demand for the program and its relevance. All universities made commendable efforts to recruit women in the 2011/12 academic year. Hawassa University had achieved the highest female intake (62 percent). Bahir Dar University achieved 42 percent, which is a remarkable record for such a new program. SAFE students are scoring first class marks confirming that they work hard while in the program.

In recognition of his eminent attainments, Hawassa University in Ethiopia made Yohei Sasakawa, Chairman of The Nippon Foundation, “Doctor of Agricultural Development Honoris Causa” during the graduation ceremony held on July 14, 2012 at the University main campus. The University of Cape Coast (UCC), Ghana, was the first SAFE institution to award Mr. Sasakawa (Doctor Honoris Causa) in 2000.

**Supervised Enterprise Projects**

In 2012, mid-career students implemented more than 200 Supervised Enterprise Projects (SEPs) in the rural communities. These projects were intended to solve particular problems of farmers along agriculture’s entire value chain. Both farmers and students collaborate to conceive those projects, find solutions and mobilize resources for project implementation. Lecturers from different departments were involved in SEPs’ planning and supervision. Ten mid-career students in Ethiopia have received financial support from the BMGF project to implement their SEPs on value chain topics. SG 2000 field staff also supervised students’ SEPs.

SEPs’ planning and implementation workshop was organized in Ghana at the request of the relatively new SAFE institutions (who joined the SAFE program after 2010). Delegates from Ilorin, Adamawa, Bahir Dar, Mekelle and Haramaya Universities attended the workshop. The University of Cape Coast shared its long experience in the implementation of SEPs with the participants. A sensitization workshop was also organized at Adamawa State University for Nigerian SAFE institutions.

The stakeholders of the program in Mali have decided to set up an advisory committee, which will provide support for the supervision of SEPs in particular and the SAFE program in general. The main mission of this committee will be to discuss and advise on the way forward of the SAFE program, including issues of sustainability.

**Farmer-Based Organizations**

Strengthening Farmer-Based Organizations (FBOs) to overcome the challenges that they face has become paramount. Following Mr Sasakawa’s expression of interest in supporting the development of strong and sustainable farmer organizations, SAA/Safe have started a new program aiming at developing FBOs in Mali, Ethiopia, Nigeria and Uganda. Case studies and feasibility studies were conducted in the four countries during 2012. The objectives of the studies were to:

- Understand the success and failure factors behind farmers’ organizations
- Identify and propose options for developing viable farmers’ organizations
- Identify appropriate organizational and management structures of farmer organizations
- Identify capacity needs

The studies indicated that the success of FBO depends on the extent to which individual members derive benefits from their membership. This largely depends on the viability of the business enterprises in which the farmer organizations are engaged. The consultants therefore recommended that SAA/Safe should ensure that the enterprises promoted have the potential for bringing economic benefits to farmers. This means that the choice of DAs and SMSs browsing the internet at Extension Resource Centers (ERCs) in Ethiopia
an enterprise should be preceded by a cost-benefit analysis. Therefore, commodity feasibility studies were conducted in the four countries to generate profiles of market-oriented and economically viable commodity value chains. Enterprise feasibility studies were context and area-specific. The findings and recommendations of the studies are now being used in the implementation process.

**Regional technical workshop**

A Regional Technical Networking Workshop for West Africa on ‘Creating, developing and sharing of modules electronically’ was held in March 2012 in Porto-Novo (Benin) with 45 participants from West and East African partner Universities and Colleges.

Participants exchanged their experiences of the implementation of the SAFE program. They critically analyzed their various efforts in the mainstreaming of the value chain in the curricula. They also toured the integrated system of production at the Songhaï Center, which is a model for the implementation of the value chain approach in farming. Participants were also trained on how to create, develop and share modules electronically through website and different ICT tools.

At the end of the four-day exchanges and discussions, participants came up with the following recommendations. These were to:

- Establish a training network among training institutions
- Develop pertinent educational equipment and set up the required technology for the formation of distance learning;
- Introduce the value chain approach to the teaching staff of the various university and college departments
- Develop remedial courses for female candidates with ongoing problems and offer additional incentives to women, as well as scholarships, to increase their participation
- Apply the experience of the Songhaï Center in other partner universities/colleges

While this report, as indicated, has concentrated on activities in the four SAA focus countries, there are also SAFE programs in Ghana, Tanzania, Benin, Burkina Faso, and Malawi. By the end of 2012, more than 4,000 mid-career extension professionals were benefitting from the program in 17 universities and colleges across Africa (below).

<table>
<thead>
<tr>
<th>SAFE Program Universities/ Colleges and Countries</th>
<th>Graduated</th>
<th>Current</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Cape Coast, Ghana (B.Sc.)</td>
<td>330 93 423</td>
<td>45 8 53</td>
<td>476</td>
</tr>
<tr>
<td>Kawadasso Agric. College, Ghana (Dip)</td>
<td>385 77 462</td>
<td>67 8 75</td>
<td>537</td>
</tr>
<tr>
<td>Haramaya, Ethiopia (B.Sc.)</td>
<td>342 52 394</td>
<td>49 21 70</td>
<td>464</td>
</tr>
<tr>
<td>Hawasa, Ethiopia (B.Sc.)</td>
<td>101 15 116</td>
<td>51 27 78</td>
<td>194</td>
</tr>
<tr>
<td>Makerere, Uganda (B.Sc.)</td>
<td>115 73 188</td>
<td>128 77 205</td>
<td>393</td>
</tr>
<tr>
<td>Sokoine, Tanzania (B.Sc.)</td>
<td>474 124 598</td>
<td>206 84 290</td>
<td>888</td>
</tr>
<tr>
<td>IPR/IFRA, Mali (Maître)</td>
<td>112 17 129</td>
<td>65 10 75</td>
<td>204</td>
</tr>
<tr>
<td>Samanko Center, Mali (Dip)</td>
<td>58 19 77</td>
<td>39 11 50</td>
<td>127</td>
</tr>
<tr>
<td>Ahmadu Bello, Nigeria (B.Sc.)</td>
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<td>32 8 40</td>
<td>150</td>
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<tr>
<td>Bayero University, Nigeria (B.Sc)</td>
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<td>63 3 66</td>
<td>133</td>
</tr>
<tr>
<td>Abomey-Calavi, Benin (B.Sc.)</td>
<td>73 8 81</td>
<td>60 16 76</td>
<td>157</td>
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<tr>
<td>Bobo-Dioulasso, Burkina Faso (B.Sc.)</td>
<td>55 14 69</td>
<td>44 7 51</td>
<td>120</td>
</tr>
<tr>
<td>Bunda College, Malawi (Dip.)</td>
<td>32 10 42</td>
<td>15 5 20</td>
<td>62</td>
</tr>
<tr>
<td>Bahir Dar University, Ethiopia (B.Sc.)</td>
<td>- - -</td>
<td>18 14 32</td>
<td>32</td>
</tr>
<tr>
<td>Adamawa State University, Nigeria (BSc)</td>
<td>- - -</td>
<td>19 5 24</td>
<td>24</td>
</tr>
<tr>
<td>Illorin University, Nigeria (B.Sc)</td>
<td>- - -</td>
<td>10 5 15</td>
<td>15</td>
</tr>
<tr>
<td>Mekelle, Ethiopia (B.Sc.)</td>
<td>- - -</td>
<td>35 5 40</td>
<td>40</td>
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<tr>
<td><strong>SUB-TOTAL</strong></td>
<td><strong>2,238 518 2,756</strong></td>
<td><strong>946 314 1,260</strong></td>
<td><strong>4,016</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOLARSHIPS</th>
<th>Graduated</th>
<th>Current</th>
<th>Total</th>
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<tr>
<td>Diploma</td>
<td>6 - 6</td>
<td>- - -</td>
<td>6</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>29 3 32</td>
<td>- - -</td>
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</tr>
<tr>
<td>M.Sc.</td>
<td>51 8 59</td>
<td>2 - 2</td>
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<tr>
<td>PhD</td>
<td>4 1 5</td>
<td>2 4 6</td>
<td>11</td>
</tr>
<tr>
<td><strong>SUB-TOTAL</strong></td>
<td><strong>90 12 102</strong></td>
<td><strong>4 4 8</strong></td>
<td><strong>110</strong></td>
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<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>2,328 530 2,858</strong></td>
<td><strong>950 318 1,268</strong></td>
<td><strong>4,126</strong></td>
</tr>
</tbody>
</table>
The Monitoring, Evaluations, Learning and Sharing (MELS) Theme began in 2011 and was incorporated into SAA’s Strategic Plan 2012-2016. MELS aims to drive SAA’s evidence-based programs by covering the whole MELS Chain.

Institutionalizing MELS

MELS was steadily institutionalized as concepts and procedures were finalized. In Ethiopia, there is a joint MELS Framework for the Strengthening Agricultural Extension Delivery in Ethiopia (SAEDE) Project that is funded by the Bill and Melinda Gates Foundation. MELS partnered with the M&E Departments of Mali’s National Directorate of Agriculture and Agricultural Development Programs in Nigeria. Uganda hosted two MELS Annual Review and Planning Workshops, while MELS Nigeria is now covering Gombe State. These efforts have enhanced capacity and increased ownership of MELS.

Needs assessment

Ethiopia carried out pre-assessment of 128 Farmers’ Training Centers for the SAEDE Project followed by a needs assessment of 1,496 farmers and 350 development agents in 2011. Improved dairy, cattle fattening and vegetable production technologies are in high demand. In Uganda, assessments covered Ntungamo District in 2011 and Gulu, Oyam, Nakaseke, Mityana, Jinja, Mukono and Lira in 2012. They identified the main constraints as a lack of quality seed and proper PHAP technologies, pests and diseases, and poor market access. In Nigeria, needs assessment was undertaken in Gombe State in 2012. Assessments allow better understanding of needs and priorities of farmers and ensure SG 2000 interventions are demand driven.

Baselines and benchmarks

Baseline surveys were carried out in 2011 to determine benchmarks for impact assessment. The base year was 2010. The survey covered 1,652 households in Ethiopia, 868 in Mali, 540 in Nigeria and 1,155 in Uganda. In Ethiopia, 77 percent of farmers planted local seed varieties and major cereal crops productivity was less than two mt/ha. Fertilizer use averaged about 50 kg/ha for DAP and 37 kg/ha of Urea – the recommended rate is 100 kg of DAP and 100 kg of Urea. In Mali, only 20 percent of family heads have formal education and only six percent are women, and crop production is the main occupation and source of income for over 90 percent of households. Baselines in Nigeria revealed that 58 percent of family heads have formal education, 43.3 percent used organic fertilizer and 39.5 percent used improved seeds. In-door bags are the most common storage (60.9 percent), while only 10 percent of farm families accessed formal credit. In Uganda, landholding was 0.4 - 1.4 ha. Crops are the most important source of income for 55.1 percent of families; SACCOs are the main source of credit and food insecurity stood at 60 percent.

Monitoring

Outcome monitoring is undertaken every quarter to help informed decision making in real time. Crop productivity enhancement (CPE) implementation improved in 2012 despite some challenges concerning the management of women assisted demonstrations (WADs) and the emergence of PTP farmers in Ethiopia. While multi-crop threshers are performing well, women cooperatives need more management training. Mali’s ministry staff and farmers appreciate CPE extension but there are challenges such as indolent village development committees and restricted access to land by women. In Nigeria, crop extension is appreciated, save for the size of demonstration plots. Meanwhile, high capital investment hinders the use of PHAP technologies and women need entrepreneurship skills development. In Uganda, over 80 percent of interviewed farmers said extension has improved knowledge and skills in agronomy, increased yields and reduced postharvest losses. However, the drying of produce is still a challenge. Purchasing power and affordability affect the uptake of technologies. Output monitoring in Uganda now includes an MS ACCESS-based relational database alongside a broader web-based Implementation Monitoring System (WIMS) as part of MELS Systems Development.

Evaluation

An evaluation of SG 2000’s CPE extension approach was undertaken in 2012. In Ethiopia, simplification of the FLP approach enabled development agents (DAs) to effectively transfer skills to farmers, who extensively use line planting of teff and wheat. Good collaboration exists between extension staff and SG 2000-Mali where demonstrations of technologies are relevant and useful to farmers. WADs
promote cohesion within and between women groups but the duration of demonstrations and weak input supply systems remain as challenges. In Nigeria, the CPE extension approach has contributed to increasing the productivity and incomes of farmers. However, youth participation in agriculture is minimal, and the involvement of women is especially low in Jigawa State. Leaders felt that SG 2000’s crop extension technologies and demonstration plots were not well aligned to those of Jigawa State. In Uganda, 94 percent of the EAs interviewed understood how to establish demonstration plots. Popular technologies included line and timely planting, spacing and fertilizer and pesticide use. Evaluations assist in understanding the relevance, usefulness and sustainability of interventions.

Impact assessments
Results from studies carried out in 2011/12 indicated that SAA/SG 2000 contributed significantly to the emergence of rice in Ethiopia and Uganda. In Ethiopia, multi-crop threshers’ use has increased and changed cropping patterns – but do require high initial investments. Twenty-two percent of total crop production is sold, and the study found that 23 percent of the farmers are commercial and 44 percent are subsistence farmers. In Mali and Uganda, stakeholder participation, business management and enterprise productivity contributed to the success of One Stop Center Associations (OSCA)s and Niet@Kenes. Entrepreneurial skills and record keeping are important for women agroprocessing enterprises in Nigeria. Results indicate that interventions are making an impact to varying extents.

Learning and sharing
Findings from studies were shared through reports, workshops, informal discussions, field days, national agricultural shows and trade fairs. MELS staff participated, and presented results at national and international meetings and published some of their works. MELS documents are found on the SAA MIS Space and MELS Theme website.

Strategic Plan
A base of evidence emerged during 2011 and 2012 and the challenge now is to grow this evidence. This is included in the SAA Strategic Plan. MELS contributed to the Strategic Plan, especially on spatial coverage and reach, potential opportunities, risks, strengths and weaknesses.
SG 2000-Ethiopia closely works with development partners to improve extension service delivery, enabling farmers to access and benefit from improved agricultural technologies. Seven projects are being implemented, including our core project, funded by The Nippon Foundation. Other projects include the World Food Program (P4P) - SAA Collaborative Project; Strengthening Agricultural Extension Delivery in Ethiopia (SAEDE), funded by the Bill & Melinda Gates Foundation (BMGF); Women Enterprises Project and Promoting Crop Diversification and Advanced Technologies in Tigray, funded by the Japan International Cooperation Agency (JICA); Quality Protein Maize Dissemination, funded by the Canadian International Development Agency (CIDA), through the Maize and Wheat Improvement Center (CIMMYT); and ATA-SG 2000-Ethiopia women empowerment collaborative project.

**Crop productivity enhancement**

A key activity in crop productivity enhancement has been the establishment of Farmer Learning Platforms (FLPs). FLPs were established in ten regions, 43 woredas (districts) and 163 Farmer Training Centers (FTCs). One FTC covers about 1,000 farm families. As part of the new crop extension approach, components of FLPs include training farmers, development agents (DAs), subject matter specialists (SMSs) and other experts, establishing demonstration plots (TOPs, WADs, PTPs and CVPs) and conducting field days. A total of 11,432 farmers (8,751 male and 2,681 female), 898 DAs and supervisors, 452 SMSs and 106 officials were trained. Training focused on crop productivity improvement, livestock and beekeeping practices. About ten training manuals were prepared and distributed to participants.

Following this, a total of 719 TOPs, 2,214 WADs, 8,378 PTPs and 185 CVPs were established in farmers’ fields and FTCs. Each TOP, WAD and PTP has 10 to 15 farmers grouped around them to learn and exchange information. Successful demonstrations, especially in the area of teff and wheat raw planting, were observed by farmers, policy makers and experts. Around 60,900 participants have attended field days of which 49,330 were men and 11,570 were women.

**Postharvest and agroprocessing**

The key area of focus in this program is the demonstration of postharvest and agroprocessing technologies, building the capacities of DAs/SMSs, who serve as trainers and training fabricators, service providers, machine operators and women agroprocessing groups.

During the reporting period, 50 PHELPs were established, 47 demonstrations conducted and four farmers’ field days organized. Although information regarding users of the technologies is limited to some specific PHELPs and cooperatives, 1,070 farmers have used multi crop threshers from PHELPs to thresh 1,046 tons of grain. Sixty-two farmers have used maize shellers from four primary cooperatives to shell 429mt of maize, two CUs have used three grain cleaners to clean 480mt of maize. Over 1,830 people have used rice mills for polishing 235mt of rice. Postharvest handling and storage management training was given to 697 extension staff. Eighteen technicians recruited from the public and private sectors were trained on fabrication and 43 on repair and maintenance, along with 231 operators who were trained on operation and handling of PHAP machines. Trainers of Trainers (ToTs) have trained 5,203 farmers. Five local fabricators have supplied 250 multi-crop threshers, 37 motorized and 325 manual maize shellers and 11 rice mills to individuals, groups of farmers and farmer cooperatives engaged in service provision.

In addition, 22 agroprocessing enterprises (13 grain and 3 milk processing centers for women and 6 rice processing centers for farmer cooperatives) were established or strengthened. ToT training was conducted for 79 partner staff and a total of 629 women members have attended training sessions. Gender awareness workshops were also organized for 896 cooperative members and their spouses.

**Public-private partnership and market access**

Smallholder farmers’ capacity and market access was developed by using workable business and financial models and marketing surveys. Theme 3 also provided training support to input dealers to improve farmers’ access to new technologies and a reliable supply of inputs, and supported the formation of farmers’ Commodity Association Trainers.
ETHIOPIA
Country Report

Demonstrating a multi-purpose thresher – threshing sorghum

(CATs). Thirty-six CAs were established in seven woredas and eight CATs were recruited.

Community-based seed production, and strengthening linkages among research, extension and input suppliers, were effectively undertaken in the project areas. Technical training was organized for 256 farmers, 79 DAs and 162 SMSs on community-based seed multiplication. The training was provided on quality seed multiplication of maize, wheat and pulses. As part of strengthening agribusiness opportunities for cooperatives, market surveys on six cooperative unions were conducted to identify market channels.

Nine Financial Service Providers (FSPs) from Oromia, Amhara, South, Harari, Tigray, Somali, Dire Dawa, Beneshangul Gumuz and Gambela have been selected to develop and test FTC level business models for smallholder farmers. Currently, about ten business models have been developed and are being implemented in more than 70 FTCs as part of the FTC loan guarantee scheme.

Information technology and human resources development

SG 2000-Ethiopia is embarking on an initiative to build capacity at woreda level so that woreda experts are able to access current information. The aim is to establish Woreda (district) Extension Resource Centers (WERCs) – equipped with computers and broadband connection. To date, 16 WERCs and four resource centers at four strategically selected ATVETs (Chiro in Oromia, Wukro in Tigray, Woreta in Amhara and Alagae in South) have been established and strengthened. A website, www.sg2000ethiopia.org, has been developed. The resource center will also be uploaded with manuals, reference materials, and the latest publications for immediate use.

SG 2000 is also introducing digital green (DG) technology and piloting it in three program woredas. SAA, in collaboration with Oxfam America and DG India, has been training frontline extension agents in this technology. The technology is a farm-level best practice dissemination tool which could be used using video production techniques, to be screened at household level using chargeable batteries and less sophisticated equipment.

Monitoring, evaluation, learning and sharing (MELS)

The MELS implementation plan, which includes needs assessment and baseline and monitoring surveys, was developed. The surveys were conducted to assess the needs and priorities of extension agents and farmers in terms of innovations and training. It was conducted in 218 P/FTCs, 218 kebeles in 22 woredas and 10 regions of Ethiopia. A detailed needs assessment report was produced for project FTCs in each woreda. The needs assessment reports are being used by other SG 2000 Themes to design their action plan and prioritize interventions. In 2011 and 2012, baseline data collection was undertaken using structured instruments/questionnaires in 129 randomly selected project kebeles and 1,652 households. The data was analyzed, results of major variables tabulated and a baseline report produced. A clean data set has been compiled and stored at the data center.

MELS Ethiopia has conducted output and outcome monitoring surveys in selected SG 2000 project sites. The main purpose of the monitoring survey was to assess implementation status and progress of SG 2000 activities and technologies such as TOPs, WADs, PTPs, multi-crop threshers, milk churners, and women agroprocessors. Detailed output and outcome field reports were produced and shared with SG 2000 Themes and management. The MELS Theme has also designed a web-based implementation monitoring system which helps to continuously track the implementation and impact of SG 2000 interventions. The web-based monitoring system is planned to be launched in 2013.

MELS has conducted three major in-depth and evaluation studies: evaluation of the crop and extension approach of SG 2000; dissemination, adoption and impact of SG 2000 promoted multi-crop threshers; and an evaluation of previous training programs provided by SG 2000 under the WFP/SAA collaborative P4P project. While there are encouraging signs of adoption of some SG 2000 technologies, such as the multi-crop thresher and line planting of teff and wheat, the studies suggested further improvement in project implementation and a revision of the SG 2000 crop extension approach are required.
Mali is one of the few West African countries that have met the goal defined by the Comprehensive Africa Agriculture Development Programme (CAADP) of allocating 10 percent of the national budget to agriculture. Also, in October 2009, the government adopted a national agricultural sector investment program – the Agricultural Orientation Law – with the target of sustaining a six percent growth in agriculture. SAA’s Strategic Plan supports these broad objectives, while focusing on the key contemporary challenges encountered by smallholder farmers in Mali. The thematic areas developed by SAA over the years 2011 and 2012 are therefore particularly relevant.

**Crop productivity enhancement**

The new Strategic Plan targets 100,000 smallholder farmers and focuses on both food security and emergent commercially oriented farmers. During 2011-12, 221 villages were involved in SAA’s CPE activities. This involved the establishment of 221 Farmer Learning Platforms (FLPs). The range of platforms utilized included 221 Technology Option Plots (TOPs), 663 Women Assisted Demonstrations (WADs), 11 Community Variety Plots (CVPs), 33,150 Production Test Plots and six Production Plots. In addition, 12,866 farmers and 147 extension agents were trained in crop production management skills. In total, 251 field days were organized to allow farmers to evaluate FLP technologies and make decisions for adoption. At the community level, SG 2000 activities are managed by Village Development Committees (VDC) to ensure sustainability. All these activities are supported by extension agents and farmers’ groups intensive training sessions.

The CPE program involved 1,000 farmers in 23 villages and covered 1,000 hectares in 2011. Cultivation rose to 1,200 hectares and 937 farmers in 2012. Improved crop variety seeds and mineral fertilizers were provided by agrodealers. Farmer-Based Organizations (FBOs) used the revolving fund from the 2010 millet grain marketing premium to purchase production inputs. However, due to the poor harvest of 2011, only 678 farmers out of the 1000 were able to pay back their input credits.

**Postharvest and agroprocessing**

Low yields and high postharvest losses currently limit the net quantity of food available to feed the quickly growing population in Mali. Between 30-40 percent of food crop production is lost before reaching the market. The use of best practice in postharvest and agroprocessing can contribute to reducing the vulnerability of smallholders to food insecurity and increase their income. The Strategic Plan looks to improve the access of 60,000 farmers to the best postharvest and agroprocessing technologies. During 2011 and 2012, 13,345 farmers benefited from these technologies.
partnership with the private sector. FBOs supported access to training, technology, financial resources, business services, and markets. SG 2000-Mali has established input shops at the village level to facilitate farmer access to fertilizers, herbicides and fungicides. Between 2011 and 2012, 23 input shops were established and 5,607 farmers bought 37,131 tons of mineral fertilizers for use on 524,441 hectares. Farmers also purchased 5,660 liters of herbicides and 2,450 bags of fungicides from the input shops. The crops that benefited from these inputs were maize, millet and sorghum.

The targets of the Strategic Plan are:

- Support 300 FBOs
- Organize 250 training sessions
- Leverage US$50,000 for agricultural production activities
- Support 1,000 Business Development Services
- Strengthen FBOs capacities to negotiate 50 contracts and collectively market 8,000 tons of food crop products.

**Human resource development**

The overall goal of the HRD Theme is to build the capacity of extension professionals to serve a broader range of smallholder farmers. As part of the capacity building of extension professionals, the LVA *(Licence en Vulgarisation Agricole)*, a 3-year BSc. Program, has replaced the 4-year BSc. for the 2011 and 2012 academic years. The program’s curriculum was reviewed, nine teaching manuals were developed for review and four more are underway. Further activities involved mid-career professional training, supervised enterprise projects, supporting Technology Villages, awarding scholarships, and supporting alumni associations, project development and networking with Modernizing Extension and Advisory Services (MEAS).

**Monitoring, evaluation, learning and sharing**

The overall goal of MELS is to establish an information and knowledge management system to enable initial screening, pre-testing and rapid appraisal of candidate technologies and strategies promoted by SAA. The modification of these technologies and activities in a timely way is central to the role of MELS. Monitoring in 2011-12 showed that 55.7 percent of TOPs respondents were confident they had a very sufficient understanding of introduced technologies. These technologies were found to be very productive by 77.6 percent of TOPs respondents and 81.3 percent from WADs. Introduced technologies were reported to have increased the yields of 88.3 percent of men and 87.5 percent of women. This data was evaluated to help build capacity while also designing a MELS system for baseline study and needs assessment.

**Commemorative Symposium:**

**Take it to the farmer**

In November 2011, senior Malian government officials, including the then Prime Minister Cissé Mariam Kaidama Sidibé, and Minister of Agriculture, Aghatam Ag Alhassane, took part in a 25th anniversary symposium in Bamako which looked back on the original vision of the founders of SAA/SG 2000 – but also to the future, covering such session subjects as ‘research to extension’ and ‘redesigning and redefining extension’. Leading collaborators from other African countries, such as Steve Obimpeh, former Minister of Agriculture in Ghana, and Zerubabel Mijumbi Nyiira, Minister of State for Agriculture in Uganda, joined representatives from international organizations, non-governmental organizations (NGOs), the private sector and the newsmedia, in examining the role of extension – and ultimately the importance of the value chain through to the consumer.
Agriculture, Nigeria’s largest economic sector, accounts for nearly 42 percent of GDP and provides employment for over 60 percent of the population. The slow growth of agriculture has resulted in increased food imports and food insecurity. Households spend up to 70 percent of their income on food, yet about 50 percent of children below five are malnourished.

Women play a major role in agricultural production, especially food processing, yet are faced with major obstacles to increasing their productivity and living standards. Recently, the government injected over NGN133 billion into agricultural programs under the Central Bank of Nigeria’s Commercial Agriculture Credit Scheme for commercial farmers and farmer cooperatives. The Bank also promotes the Nigeria Incentive-based Risk Sharing System for Agricultural Lending, which de-risked agricultural lending by encouraging financial institutions to increase lending to the sector. Governments also procured and distributed agricultural inputs like improved seeds, fertilizers and agrochemicals to farmers with a 40 to 50 percent subsidy.

In 2011, 5G 2000 activities expanded in the states of Jigawa and Adamawa through funding support, while Gombe became the third state supporting SAA activities in 2012. That year, the USAID-MARKETS maize program expanded to 12,000 farmers from 5,000 in 2011. Themes 2 and 5 operated in Jigawa and Adamawa States, while Theme 1 and 3 operated in all the six states of our operations.

Crop productivity enhancement
A total of 161 and 300 CBEAs were trained in 2011 and 2012 pre-season training, respectively. The Theme established 2,309 and 2,286 Production Test Plots (PTPs), 278 and 557 TOPs, and 743 and 600 WADs on cereals, legumes and oil seeds in 2011 and 2012. Field days were conducted in all six states; 13 and 24 field-days were conducted across the six states in 2011 and 2012. Thirty-two motorcycles were purchased and distributed to extension agents (EAs) in Adamawa State in 2011 on a hire-purchase basis.

A total of 388 and 355 demonstration plots of cowpea, soybean and groundnuts under the care of EAs as well as 7,224 and 8,916 Satellite Demonstration Plots, with minimal EA supervision, were conducted under the Bill & Melinda Gates Foundation funded N2Africa Project in 2011 and 2012. The project promotes the use of Rhizobium inoculants to enhance nodulation, soil fertility and yields of legume crops, such as cowpea and soybean. The MARKETS Project, through SAA, supported 5,000 and 12,000 maize farmers in 2011 and 2012, with training and linkage to grain buyers. Farmers were responsible for their inputs. Average maize yield from farmers’ fields in the two years is 4.5 t/ha.

Postharvest and agroprocessing
In 2011/2012, PHAP training was held to build capacity for farmers and agroprocessors that helped to bring their businesses to comparative advantage levels. In 2011, 37 and 102 agroprocessors, 38 and two machine operators, 45 and 34 extension agents, three and nine fabricators, and three and nine mechanics, were trained in Adamawa and Jigawa States during the two years under review. Similarly in 2012, SAA trained 159 and 136 agroprocessors, 26 and 32 EAs, 10 and 24 technicians, 400 and 822 farmers in Adamawa and Jigawa States. Six hundred farmers in Kaduna were trained under the MARKETS program. Agroprocessing machines were identified, tested, verified and sourced for farmers and now operate as service providers in Adamawa and Jigawa states.

Twenty-eight individuals have acquired postharvest machines on loan to provide services to their communities for income generation. Eight Postharvest Extension Learning Platforms were established in Jigawa and Adamawa States for rice, groundnut oil extraction, and cassava processing. In 2012, the PHAP Theme worked with SEP students in the SAFE program to demonstrate the effectiveness of hermetic storage for cowpeas. Results show that hermetic storage facilities that use Purdue Improved Cowpea Storage bags are effective and cheap.

Public-private partnership and market access
Formal partnerships were successfully developed between the private and public sectors. Emphasis focused on strengthening the capacity of private agribusinesses and smallholder seed supply systems, improving institutional linkages, fostering market linkages and facilitating commercial credit services for farmer associations and entrepreneurs. Fifteen private agribusinesses were sensitized to support agricultural extension. Some 130 community-based seed growers were trained, and established 205 ha of foundation seeds, yielding 36.07 mt of assorted certified seeds in 2011 from which 1.5 mt were supplied to Jigawa State.
Three farmer groups in Adamawa State were linked to a company and procured 3.5 mt of assorted seeds worth $3,435. In 2012, three agrobusiness plans were developed on inputs use; coupled with farmer training, this led to increased use of production inputs by 15,000 farmers. An inventory of potential service providers was conducted for value chain actors, leading to identification of 12 processing companies in maize and rice, which were then linked to Community Based Organizations for grain supply. Five agribusiness and marketing training programs were conducted in 2012, involving six Commodity Association Trainers, six FBOs, 12 processors and 8,951 participants.

**Monitoring, evaluation, learning and sharing**

To institutionalize MELS in SAA activities, training on the use of GPS hardware, data collection techniques and methodologies, village listing survey and market survey methodologies and advance use of GPS were conducted in Jigawa and Adamawa States. A comprehensive needs assessment survey was conducted in Gombe State by December 2012 and data was collected, analyzed and a report submitted. Unstructured field monitoring was conducted in Jigawa and Adamawa States with a focus on activities of Theme 3 in selected zones of Jigawa and Adamawa States. Rapid appraisal monitoring on thematic activities was undertaken in Adamawa and Jigawa States and the findings have been shared among SAA thematic areas. An evaluation study on approaches, relevance, effectiveness and efficiency of the SAA technologies in Nigeria was conducted, covering 30 villages from 15 local governments each in Jigawa and Adamawa States; three households in a selected community were approached, giving a total of 80 respondents in the two states.

Work proceeded in 2012 on the Memorandum of Understanding (MOU) between SAA and the Federal Ministry of Agriculture and Rural Development to expand joint activities in support of smallholder farmers, poverty eradication, job creation for Nigeria’s youth and national food security. The MOU was signed early in 2013.
During 2011 and 2012, project interventions were made in 18 districts, including those in partnership with Uganda Breweries Limited/European Cooperative for Rural Development, with funding focusing on white sorghum; the Agribusiness Initiative (aBi) Trust on improving farmers’ access to markets through the One Stop Center Associations (OSCA) approach; and the World Food Programme Purchase for Progress (P4P) support for improving PHAP. All were part of the implementation of the Strategic Plan process.

Participation in Uganda’s annual national agricultural show continued to keep SG 2000 in the limelight due to the effective demonstration of the value chain approach – winning second prize in 2011, and first prize in 2012 in the small-scale exhibitors’ sector: This coincided with the SAA/Safe board meeting hosted in Uganda in November 2012.

A number of staff came on board during this period including the Country Director, Dr. Roselline Nyamutale, in 2011, the Theme Coordinator for Public-Private Partnerships and Market Access, and four Program Officers, one for each theme, excluding MELS.

**Crop productivity enhancement**

Demonstrating best practices and technologies to increase production and productivity of marketable enterprises help to lift smallholder farmers out of poverty. In Uganda, some 14,500 farmers were reached directly through farmer learning platforms (FLPs), field demonstrations and through field days, information and knowledge spillover in the community in 12 districts, 32 subcounties, and 133 parishes. Three hundred and eighty-four technology option plots (TOPs), 822 women assisted demonstrations (WADs), and 55 community variety plots (CVPs) were established. Tangible benefits, such as improved farm productivity, and income growth, were realized as indicated by the yield data. Thirty-two extension agents (EAs) and 266 community-based facilitators (CBFs) were trained as trainers of trainers (TOTs), who in turn trained farmers in appropriate agronomic practices and technologies. Nearly 4,000 production test plots (PTPs) were established by adopters who appreciated the technologies demonstrated.

Field days were attended by 3,391 stakeholders (41 percent women), including the Minister of State for Agriculture, Hon Zerubabel Nyiira, SAA board Chair, Professor Ruth Oniang’o, district officials, agricultural technical staff, representatives of seed companies, local stockists, EAs, and farmers. Improved farmer access to agro-inputs was boosted through training of input stockists and linking them to agro-input companies. Increased demand for inputs among farmers in districts of intervention led to the establishment of stockists’ shops.

In collaboration with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), CIMMYT (Maize and Wheat Improvement Center) and CAii seed company, over 7,000 copies of assorted referral materials – crop production manuals, posters and leaflets – were developed and disseminated to EAs, CBFs, farmers and at the Jinja Annual National Agricultural show. TV documentaries and radio programs enabled SG 2000-Uganda to reach out to many more farmers across the country.

**Postharvest handling and agroprocessing**

Two hundred and seventy-five EAs and CBFs, 90 commodity association traders/trainers (CATs) were trained as TOTs on PHAP practices and technologies. In turn they trained 3,952 farmers, 12 OSCA center managers on PHAP machine maintenance and operation, 12 local technicians on machine fabrication, and 19 masons and 15 artisans on cribs’ construction. Twelve thousand copies of PHAP posters were developed and distributed to EAs and farmers. A variety of PHAP technologies were demonstrated including trolleys used to convert heavy motorized fixed maize shellers into mobile ones, a multigrain cleaner and threshers; 30 manual and eight motorized shellers, including a self propelled maize sheller, a multigrain thrresher; two motorized cassava chippers, ten cocoons; 24 PVC storage tanks, 20 super grain bags, 13 collapsible driers, 25 maize cribs, and two drying yards.

Seventeen weight scales at OSCAs/postharvest enterprise learning platforms (PHELPs) have reduced the rate of cheating by traders, while eight moisture meters have improved produce quality. One hundred and eighteen small-scale women agroprocessors were trained on business management, agroprocessing, quality control and confectionery with a focus on using cassava as a major raw material. At Luwero OSCA, the trainees revitalized the bakery and are making snacks for sale. Since 2012 they have earned US$465. Pallisa OSCA continues to process quality cassava flour and Tororo OSCA, groundnut paste and packaging.
PHAP demonstrations resulted in increased demand for the equipment. A total of 95 PHAP machines were bought from fabricating partners including ten motorized and six manual cassava chippers, nine motorized cassava graters, four cassava press machines, 11 feed mixers, 12 manual maize shellers, six maize hullers, six maize mills, 11 motorized maize shellers, two multi-grain threshers, five rice mills, one rice thresher, one groundnut paste grinder, two motorized groundnut shellers and four seed cleaners.

Seven PHELPs/service centers also offered services to farmers. Over 25,000 farmers accessed services from 25 PHAP private service providers in 2012. PHAP machines at the PHELPs/OSCAs generated US$ 218,422 at six centers. Women were provided with manual shellers in eight districts that improved grain quality and generated income. They also started savings and credit schemes.

Public-private partnerships and market access

A market survey was conducted to identify possible markets and their demand. A directory of credible business service providers (BSPs) developed four chemical input companies, three seed companies, 11 transporters, ten machine fabricators, 14 machine suppliers, and seven produce buyers. CATs promote effective and efficient marketing of farm products and are linked to bigger buyers. For the services they render to both farmers and buyers, they charge a 5-10 percent commission which is factored into the amount of inputs delivered, with produce bulked and sold.

Two models have been developed – the input delivery to farmers model and the trader-village agent-farmer model. Under this model, 24 stockists, including eight CATs, were trained. Fourteen have opened stockist shops at grassroots level, accessed inputs worth US$82,408 and distributed inputs to farmers. Most successful has been the lady stockist in Ntungamo District, who started in 2011 with US$755, and now has a capital base of US$2,830. She has paid off her US$2,000 loan, renovated the shop and put her children into better schools. She plans to open a second shop in 2013.

The trader-village agent-farmer model is also overseen by CATs who facilitate linkages to markets. In 2012, CATs and VAs facilitated six OSCAs to bulk and sell 1,678mt of grain and made sales worth US$117,458. Major buyers included schools, produce traders, poultry hatcheries, livestock feed mills, nutrient feed formulation industries, and - crossing borders - into Kenya, Rwanda and Sudan. The models are seen as self-sustaining while demystifying the perception that middlemen cheat farmers. The CATs buy in cash from the farmers, and also make profit from the sale of inputs. Major partners in the models include aBi Trust, Savannah Commodities, Agro-Empowerment Centre, Equity Bank, Balton Uganda and Sanyu Feeds.

Based on the above models, four OSCAs are currently in full operation. ZAABTA in Luwero spearheaded the revival under the leadership of a graduate economist and established eight agricultural enterprises. To enhance women’s participation, 45 women groups have been trained in enterprise selection, finance management, record keeping and saving schemes.

Monitoring, evaluation, learning and sharing

A stakeholders’ workshop to launch MELS-Uganda was held with participants from the National Agricultural Advisory Services, MAAIF and SG 2000 District Coordinators. Tools for needs assessment, baseline surveys, and outcome monitoring were developed and piloted, guided by the Theme Director, and are continuously used for data collection. A baseline survey was conducted in 2011 and benchmarks established for SG 2000-Uganda’s strategic plan. To share and learn with farmers and other partners, feedback on needs assessments, and baseline studies were done.

A number of in-depth studies were undertaken – including ‘Utilization and adoption of disseminated maize PHAP technologies’. Results indicated that despite the training and demonstrations done, adoption and utilization are still wanting due to low affordability among smallholder farmers. An ‘Assessment of One Stop Center Associations (OSCA)s’ was complemented by studies on FBOs and a feasibility study by SAFE. The studies revealed that OSCAs are a good approach to organizing farmers and increasing access to markets. However, various management and economic challenges greatly impacted on their sustainability. Strategies for sustainability included a private sector approach, linking OSCAs to financial institutions, institutional capacity strengthening, and annual audits.
A number of publications are available from SAA. Please visit our website to access the full range of our publications, newsletters and videos.

**FINANCIAL REPORT HIGHLIGHTS FOR SAA AND SAFE**  US dollars

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<th>Sasakawa Africa Association</th>
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**Details of Receipts**

| Grant from The Nippon Foundation | 6,500,000 | 6,500,000 |
| Grant from the Bill and Melinda Gates Foundation | 2,100,362 | 1,266,451 |
| Grant from JICA | 486,178 | 349,681 |
| Interest | 4,519 | 7,617 |
| Loan Recovery | 29,426 | 312 |
| Others | 901,650 | 209,235 |
| Other Grant for Mali/Nigeria/Uganda | 3,257,764 | 1,437,018 |

**Details of Expenditures**

| S2000 Country Program | 2,880,890 | 3,004,653 |
| Ethiopia | 513,046 | 448,170 |
| Mali | 776,109 | 967,140 |
| Nigeria | 677,078 | 603,031 |
| Uganda | 914,657 | 986,312 |
| Thematic Program | 1,138,847 | 792,931 |
| Crop Productivity Enhancement | 256,892 | 250,044 |
| Postharvest and Agroprocessing | 554,441 | (283,177) |
| Public-Private Partnership and Market Access | 129,546 | 86,494 |
| Monitoring, Evaluation and Learning | 197,968 | 173,216 |
| Corporate Program | 2,125,497 | 2,394,924 |
| Miscellaneous | 28,617 | 830 |
| JICA Partnership Program | 532,554 | 316,046 |
| BMGF Program | 1,870,702 | 1,150,125 |
| Mali/Uganda/Nigeria | 2,551,560 | 1,260,539 |

<table>
<thead>
<tr>
<th>SAFE</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Budget</td>
<td>1,800,000</td>
<td>1,800,000</td>
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<tr>
<td>Actual Spending</td>
<td>1,956,146</td>
<td>1,712,067</td>
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<td>Actual Receipt</td>
<td>1,800,632</td>
<td>1,800,474</td>
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<tr>
<td>Cash Balance at the end of year</td>
<td>508,154</td>
<td>663,667</td>
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</tbody>
</table>

**Details of Receipts**

| Grant from The Nippon Foundation | 1,800,000 | 1,800,000 |
| Others | 632 | 474 |

**Details of Expenditures**

| Administration | 654,855 | 584,279 |
| University Program | 242,953 | 256,448 |
| Scholarship | 117,057 | 107,171 |
| Winrock | 388,325 | 353,917 |
| Others | 552,956 | 409,706 |

*Final audited results for 2012 not yet available (SAA and SAFE)*

Credits: Writing/Editing Raitt Orr, Design and print B-Creative
“Feeding the Future”

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