



## International Twinning Partnership Program 2006-2011

### End of Program Report

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## **Acronyms**

AEA	Agricultural Extension Agent
AGM	Annual General Meeting
AIC	Agricultural Institute of Canada
AO	Agricultural Officer
ARI	Animal Research Institute (Ghana)
BMP	Best/Beneficial Management Practices
CBO	Community Based Organization
CIDA	Canadian International Development Agency
CSAS	Canadian Society of Animal Science
CSE	Canadian Society of Extension
CSHS	Canadian Society of Horticultural Science
CSSS	Canadian Society of Soil Science
DSVP	Dry Season Vegetable Production (Ghana)
EIAR	Ethiopia Institute of Agricultural Research
ESSS	Ethiopian Society of Soil Science
FFS	Farmer Field School (Ghana)
FPR	Farmer Participatory Research (Vietnam)
GEM	Gender Equality Mainstreaming (Working Group)
GETT	Gender Equality Task Team
GhIH	Ghana Institute of Horticulturists
GIS	Geographic Information System
GSAP	Ghana Society of Animal Production
IDRC	International Development Research Centre
IPM	International Partners' Meeting or Integrated Pest Management (see context)
ITPP	International Twinning Partnership Program
KNUST	Kwame Nkrumah University of Science and Technology (Ghana)
LoA	Letter of Agreement
MAFRI	Manitoba Agriculture, Food and Rural Initiatives
MARD	Ministry of Agriculture and Rural Development (Vietnam)
MDG	Millennium Development Goal
MoFA	Ministry of Food and Agriculture (Ghana)
MoU	Memorandum of Understanding
NGO	Non-governmental Organization
NRMC	National Resource Management Centre (Sri Lanka)
NRM	Natural Resource Management (Ethiopia)
OA	Organizational Assessment
OFC	Other Field Crops (Sri Lanka)
OSP or OFSP	Orange-flesh sweet potato
PCA	Project Coordinating Assembly (Vietnam)
PLUP	Participatory Land Use Planning (Vietnam)
RBM	Results Based Management
SADP	Sustainable Agriculture Development Program (Nepal)
SDP	Social Development Priority
SFRI (SFI)	Soils and Fertilizers Research Institute (Branch of the Vietnam Soil Science Society)
SSSSL	Soil Science Society of Sri Lanka
TOT	Training of Trainers
TPCCC	TSAAE Project Canadian Coordinating Committee
TSAAE	Tanzania Society for Agricultural Extension and Education
UCW	United Church Women

UDS	University of Development Studies (Ghana)
UWR	Upper West Region (Ghana)
VFA	Village Farmers' Association (Vietnam)
VSSS	Vietnam Society of Soil Science
WTO	World Trade Organization

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## **A. Executive Summary**

This summary provides the highlights of the End of Program Report for the Agricultural Institute of Canada's International Twinning Partnership Project 2006-2011, including results, sustainability, lessons learned, the environment and gender equality cross cutting themes and public engagement. The full report is a thorough review of the program which follows the

content and format as specified in the Contribution Agreement from CIDA.

To plan, implement, assess and evaluate this program, the ITPP used a unique and effective partnership working with Canadian and Southern scientific society members who brought scientifically proven, environmentally sustainable technology and applications, and joined with the work of strategically chosen government departments, NGOs and community groups to initiate, support and complement extension activities, technology and methods with rural beneficiaries.

This built a cohesive initiative that recognized each project group's beneficiary input and direct knowledge of the local context – cultural, political, economic, geographic and climatic - and was based on the scientific expertise and knowledge of members of all partner organizations. The results are impressive. Farming moved from subsistence to a source of income and diversification of agricultural production minimized risks. The more sustainable and secure sources of income have given beneficiaries the capacity to pay school fees and medical costs, to improve their housing and to provide better nutrition for their families.

The mutual trust built between farmers and project workers over the five years has been a significant factor in increasing the adoption rate of new beneficial management practices.

The enhanced collaboration which has built among researchers, Ministries, traditional leaders, organizations and agencies has increased the efficiency and effectiveness of implementing activities and provided mechanisms for the sustainability of results.

Community run organizations now have skills, knowledge and confidence to provide support, encouragement, information and skills to a greater number of their community members. Networks in project countries are stronger and now support project delivery and extend the knowledge and skills to a wider reach of beneficiaries.

### **OUTCOMES**

The program produced measurable results in all five outcome areas.

1. Demonstrated results show that food security and food access for poor communities has increased, including for people impacted by HIV/AIDS. (See Section B.)

- A two fold increase in vegetable production, greater diversity in crops produced and reduced post-harvest losses (Ghana)
  - Collaboration between the two partners in Ghana increased the availability of vegetables and meat in participating communities and diversified peoples' food sources.
  - Average yield increases of:
    - 60% paddy rice, 55% tomato, 70% maize and 41% cassava. (Tanzania)
    - 15% to 30% general and 40% to 60% rice (Sri Lanka)
    - 19% to 24% rice, 23% to 42% corn, 34% to 42% winter vegetables, 34% to 46% soybean and 31% peanut (Vietnam)
2. Demonstrated results show that rural household income has increased. (See Section B).
- Average annual incomes increased 28-66%. (Ghana, Sri Lanka, Tanzania, Vietnam).
  - 98% of those surveyed reported positive changes with 70% reporting increased income for household needs. (Ghana horticulture)
  - 84% of women beneficiaries were able to meet household needs due to agricultural income. (GSAP)
  - 100% of participants secured incomes above the international poverty line (US\$1.25 per day) (Tanzania)
  - Average income per capita rose 28-36% and households living in poverty reduced by 47-52% (Vietnam)
3. Demonstrated results show that successful environmentally sustainable agricultural practices have been implemented. (See Sections B and G.)
- All projects successfully promoted the adoption of Beneficial Management Practices. Examples of adoption rates are: 94% appropriate nutrient application, 90% mulching, 87% composting and 83% bucket kit irrigation (Ghana) and 100% appropriate nutrient application and soil amendments, 95% new rice varieties, 80% vegetable cropping system (Sri Lanka).
  - Documents from workshops now form the basis for developing new agronomic recommendations and strategies for climate change mitigation (Ethiopia)
4. Demonstrated results show that strong professional agricultural organizations have had a positive impact on national regulatory frameworks. (See Sections B, L and M.)
- All southern partner organizations completed organizational assessments and are acting on recommendations for strategic planning, sustainability and engagement of youth and women.
  - Members with scientific research backgrounds now know how to engage rural farmers to adopt improved agricultural practices and members in extension now have better access to agricultural innovation information.

- All partner organizations generated collaborative relations with government departments, research and academic institutes, local agencies and NGOs fostering sustainability of community-level project endeavours.
  - The formation and adoption of standard tools and systems for financial management, organizational assessment, project monitoring and reporting established expected standards for all partners, and increased their effectiveness as project managers and agents of development.
  - Partner organizations now make presentations and briefing notes for Ministries and senior government officials, publish agricultural research of their members, serve on national boards and in senior roles in government and the private sector and are sought by government for input to the resolution of agricultural challenges.
5. Demonstrated results show that Women are now active participants and beneficiaries of agricultural endeavours. (See Sections B and F – overseas and Canada.)
- International engagement in task teams and working groups advanced gender equality mainstreaming in both developmental and institutional areas.
  - All projects gave particular consideration to women, youth and vulnerable groups through direct project focus or designed activities, materials, timing and location to increase participation.
  - Increased female membership in SPOs and in rural organizations created a more supportive environment for women to participate and become decision makers. This is evidenced by the number and proportion of women who were elected to leadership positions by members within their individual scientific societies and organizations.
  - Involving more rural women beneficiaries within projects increased their capacity to participate in projects and benefit from agricultural endeavours. Women farmers are peer trainers, contributors to radio broadcasts, adopters of new technologies, group members and leaders, entrepreneurs, marketers and participants in field days, field visits, and farmer participatory research.

The program did experience setbacks.

SRICANSOL was unable to conduct activities in the conflict zone during the war, however they selected an alternate area which focused on growth in the fruit sector and in doing so engaged more female participation.

There were also unexpected positive results.

When TSAEE used oral communications in lieu of written training materials where literacy levels were insufficient for text, it improved language functionality. In 2006, the group in Lubuga Village knew only their tribal language of Sukuma. By the conclusion of the project they were also reading, writing and speaking Kiswahila.



Some results were more difficult to measure accurately.

Improved health was a difficult area for projects to measure with quantitative indicators because baseline data was often lacking and local health statistics were not always accessible. This necessitated using indirect and qualitative indicators when assessing improved health results.

## **SUSTAINABILITY OF RESULTS**

Variances from expected results are limited because the partners developed mechanisms to avoid many risks identified in CIDA's 2005 program evaluation. These included ensuring clear roles and responsibilities, promoting and protecting the good reputation of all parties, improving monitoring and reporting, addressing climate change, reducing the high dependence on key individuals and working closely with government to be more aware of upcoming policy and program changes. These mechanisms also strengthened the sustainability of results.

Southern partner organizations were thoroughly involved in the design, delivery, monitoring, evaluation, and reporting of projects in a process that enhanced ownership and improved sustainability of the results.

In each of the project countries, Southern partner organizations collaborated with government agencies, academic and research institutes, NGOs and community based organizations for the delivery and implementation of project components. In many cases, the relationships and responsibilities were formalized by signing memoranda of understanding (MOU) which supported current endeavours and ensured sustainable results through the adoption of project approaches into ongoing government or NGO programs.

At the community level, individual projects built sustainability by focusing on providing skills training to farmers and to extension officers working within the community sites, and by teaching skills to rural beneficiaries and providing resources on a cost-recovery basis. Rural beneficiaries expanded their operations to include new agricultural and processing activities and technologies. This diversification has improved stability and resilience in both agricultural production and income generating opportunities.

The skills and proven expertise to plan, implement, monitor and report on projects has improved the capacity of SPO members to develop proposals to local and international funders for support to strengthen and maintain their scientific, community and farmer organizations, and to conduct rural and agricultural development.

Southern Partner Organizations (SPOs) strengthened their financial sustainability by increasing membership numbers which increased revenue and their human resource capital. By increasing members' skills, some SPOs are positioned to generate income by providing training programs, advisory services, publications, lectures and workshops at a fee to other organizations and non-member individuals.

Organizations considered succession planning in their operations, diversifying their membership through attracting and maintaining female, student and senior scientist members and those from more remote geographic and varied technical areas.

The increased understanding of gender equality mainstreaming within and among SPOs, CPOs, rural stakeholders, and AIC has increased sustainability in the recognition and involvement of female members and beneficiaries in all facets of the program.

Outcomes that are most sustainable have tended to be low cost and primarily dependent on knowledge and skills acquired from the project and local inputs and resources.

The least sustainable outcomes affecting partner organizations are those which rely heavily on external funding, external technology and external expertise. The impact of climate change and domestic inflation rates could negatively impact the sustainability of some program results in future.

See Section M for detailed review of sustainability of Program results.

## **LESSONS LEARNED**

All partners learned lessons about the definition of needs, accountability, roles and responsibilities, complementary skills areas, participation and supportive tools and methods.

Identification of needs for rural/agricultural development includes a respect for indigenous knowledge and working in partnership with rural beneficiaries when determining which needs can be realistically and successfully addressed. It takes into account the demographics, skills and abilities of the group and the scientific technology and methods available. The beneficiaries and the scientific society members both have a role in determining how the science can be adapted to the locality and the group to be most successful in meeting the expressed needs.

Relating needs to tangible goals was particularly successful. Tangible goals are easily identified improvements in livelihoods which can also be measurable indicators of larger goals such as food security and poverty alleviation.

Clearly defined roles and responsibilities enabled faster decision and action with the SPO and amongst partners. This was especially important when working with several partners, community organizations, government agencies and NGOs. Partners found that role definition helped to promote disciplined, timely and dependable action and monitor compliance to agreed upon budgets, standards, timelines and expectations. It was particularly effective to separate the roles and responsibilities of project implementation from those of organizational management and governance.

Participatory processes created support from stakeholders, commitment from beneficiaries, built the team spirit of a global network of project partners and developed a true ownership of the program by all participants.

While implementing the projects, partners also learned that skills and knowledge in non-agricultural areas such as financial management and analysis, record keeping and group formation, facilitation and dynamics, can greatly assist in the adoption of agricultural beneficial management practices.

Partner organizations learned to focus on their areas of expertise and found it more effective to collaborate with government or non-government organizations that provided complementary assistance such as small producer loans or breeding stock or seeds.

Based on the success of previous programs, AIC developed and provided project coordinators with common templates for reporting. All partners recognized the efficiency and effectiveness of standard procedures, and forms for gathering, recording and reporting information. SPO and CPO partners also increased their understanding of the need for accurate data to enable them to strategize, plan, measure, assess and evaluate. Standard forms and methods for data collection would be beneficial tools to develop for future project implementation.

See Section N for a complete review of lessons learned during the Program implementation.

## **ENVIRONMENT**

All ITPP projects followed the principle of appropriate agricultural production in relation to the environment and moving from environmental soundness to economic linkages and growth. To accomplish this, the ITPP put into practice its assembled knowledge of the direct connections between natural resources, land management, productivity, livelihoods and poverty alleviation in rural communities.

Expertise within ITPP projects identified and appropriately addressed existing and potential environmental conditions, impacts, constraints, and opportunities. Project partners used benchmark data and results to assess, select and manage appropriate project locations and monitored results to ensure the immediate local containment and remediation of any negative consequences and the wider promotion of beneficial agro-environmental practices through responsive programming.

Southern partners researched, monitored and reported on environmental effects, Canadian volunteer members assisted with recommendations based on relevant professional experience and current research and AIC monitored environmental impacts through project reports, and verified conditions during project monitoring trips.

AIC drew on the wealth of program partners' scientific skills and knowledge related to climate change to form the AIC Climate Change Task Team (ACT2) which will ensure that AIC and project partners build on the knowledge and expertise of scientists and indigenous knowledge of rural beneficiaries when developing appropriate and sustainable responses to climate change in program and project plans.

Given the influence of climate change on basic food security reliable and accessible information for project partners was highlighted as an important area of need. Under the guidance of the ACT2, country specific resource handbooks were produced which include the use of introductory principles in climate change, current and climate change projected crop calendars, projected climate impacts and appropriate responses in sustainable agriculture, introductory participatory adaptation tools, and links to country specific reports.

Individual ITPP projects achieved different levels of results that had a positive environmental effect. Rural beneficiaries quickly saw an improvement in the local environment, partner organizations gained skills and expertise that improved reporting, analysis and recommendations, those making policy decisions are more informed and aware and project partners have made scientifically based recommendations to policy makers that will have regional and national impacts.

See Section G for a detailed assessment of environmental results.

## **GENDER EQUALITY**

AIC and its programming partners took a proactive step when they determined the ITPP objectives "to advance the representation and voice of women as participants and beneficiaries of agricultural endeavours". Leading by example, AIC committed itself to work on Gender Equality in its own administration, governance, activities and programs, and became a leader amongst organizations in doing so.

In 2007, AIC began to examine whether the current gender profile of the profession was correspondingly reflected in its own membership, structures and programs. The ITPP called for volunteers to participate in a short term Gender Equality Task Team which hired consultants to conduct an institutional audit, organized a Gender Equality Roundtable in conjunction with the 2007 IPM and AIC's AGM, developed a strategic plan for gender equality in AIC, created a gender equality policy and initiated the establishment of the long term group, the Gender Equality Mainstreaming working group.

The GEM Working Group further demonstrated strengthened knowledge and capacity to do gender analysis within AIC. The GEM provided guidance to AIC on AIC's Gender Equality case study, its honours and awards process, Gender Equality Strategic plan, the gender equality crosscutting theme for project proposals, AIC's Climate Change Task Team (ACT2), and the *Sustainable Futures* magazine.

AIC also expanded its communication methods and increased awareness amongst members and organizational decision-makers about gender equality mainstreaming by adding a Gender Equality button to its website home page with links to background information, resources, and the AIC gender equality policy and by posting a monthly news digest produced by members of the GEM Working Group.

ITPP project coordinators and GE reps monitored gender equality results against established indicators and reported every six months to AIC. AIC staff reviewed Narrative and Results Based Management (RBM) reports from all seven international projects from a gender equality perspective and provided feedback to project partners to support them in mainstreaming gender equality.

SPOs demonstrated increased capacity to do gender analysis. In their end of project reports, they collected data on economic, environmental and social indicators and analyzed it from a gender perspective. GhIH analyzed 40 tables of data, GSAP analyzed 24 and VIETCANSOL analyzed 21. This data was analyzed by project coordinating committee members with particular attention to Decision Making, Rights, and Resources and Benefits, which includes livelihoods, institutional capacity, policy change and well-being and basic needs.

Rural women's independence within the rural context was described in end of project reports as increased respect, greater appreciation for women's workloads, sharing of benefits/income, participation in household land planning and increased access to improved technologies which created greater opportunity for engagement in productive income-generating activities.

Gender equality training at the community level increased men's and women's awareness of and legal rights related to land ownership and fair division of labour.

See Section F for a complete analysis of gender equality issues and results in the Program overseas and in Canada.

## **PUBLIC ENGAGEMENT**

The ITPP budget for programming in Canada was not high but thanks to the voluntary contributions of our Canadian program partners, the activity level was robust and reached thousands of Canadians on an annual basis.

AIC members and members of Canadian partner organizations live throughout Canada and have many contacts with rural and urban community organizations, professional groups and work sectors. Through these networks, AIC members shared success stories about the International twinning Partnership Program and its activities.

Volunteers worked with individual and organizational members of AIC to increase awareness of the contributions that AIC's partner organizations make to international development and to promote opportunities in scientific learning and skill development. They worked with the

scientific societies to apply professional science in context specific settings and to promote innovations in agriculture which improve household food security and alleviate poverty. They also worked with community organizations to create awareness about the need for innovations in agriculture, improved household food security and the alleviation of poverty.

See Section J for details on public engagement activities and how these activities contributed to public awareness and understanding of international development issues.

## **CONCLUSION**

The longer term goal of the Program is embodied in the ITPP impact statement: Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities. The program can be credited with contributing substantially toward the successful achievement of this goal. ITPP project beneficiaries in rural communities now have improved economic, environmental and social conditions.

Improved crop yields, better animal production practices, marketing and value added processing have reduced the number of households living in poverty and given all beneficiaries a greater capacity to meet household needs. There is a decrease in, and safer use of agricultural chemicals, improvement in soil properties and a greater protection of indigenous forage species. Younger people are farming, there is strong, skilled local leadership, and strong supportive community groups actively involved in community well-being. Women have an improved status due to their increased income, more opportunity for involvement in activities and decision making and a more equitable share of community and household benefits. Families have improved nutrition and health, more children (girls and boys) are attending school and have enhanced ability to improve their housing, reduce their labour (bicycles, carts) and increase their knowledge and opportunities (radios, phones).

Partners and beneficiaries have celebrated the success of the ITPP. It has increased people's opportunities and confidence and it has changed lives and communities. Partners have skills, experience and networks to continue to make positive changes and are eager to begin implementing a new project which will use the results from the 2006 to 2011 ITPP as baseline data for future endeavours.

The driving force of the ITPP was volunteers from scientific societies who gave their skills and knowledge through in kind contributions of their time. In kind contributions totalled 1.5 million dollars from Canadian scientists and 3.5 million dollars from southern scientists. AIC is indebted to the many volunteers who participated in the program, gave it direction, momentum and guidance.

AIC is grateful to CIDA which provided the funding necessary to accomplish the many results outlined in this report and to the CIDA Program Officers who provided guidance, encouragement and information on procedures, policies and requirements.

## **B. Program goal, objectives and partners**

### **i. Program Goal**

The AIC International Twinning Partnership Program will extend global connections between professional agricultural organizations, increase their capacity and impact nationally and internationally through professional exchanges and strategic activities that increase domestic food security, promote gender equality and help to alleviate poverty.

### **ii. Program Objectives**

The 2006-2011 AIC International Twinning Partnership Program focused on the achievement of five objectives:

- Objective 1:** To increase food security and food access to the poor and particularly those communities affected by HIV and AIDS.
- Objective 2:** To increase household income in rural areas.
- Objective 3:** To successfully implement environmentally sustainable agricultural practices.
- Objective 4:** To have a positive impact on the national regulatory frameworks as they impact on agriculture.
- Objective 5:** To advance the representation and voice of women as participants and beneficiaries of agricultural endeavours.

### **iii. Program Partners**

Five partnerships at the 2006 commencement of the ITPP:

- *The Canadian Society of Horticultural Science & the Ghana Institute of Horticulturists*  
Strengthening the Impact of Horticulture on Social Development in Ghana
- *The Canadian Society of Animal Science & the Ghana Society of Animal Production*  
Integrated Crop and Livestock Production in Northern Ghana
- *TSAEE Project Canadian Coordinating Committee & the Tanzania Society of Agricultural Education and Extension*, Youth and Women Agricultural Training Project
- *Canadian Society of Soil Science & the Soil Science Society of Sri Lanka*  
SRICANSOL II Sustainable Soil and Crop Management
- *Canadian Society of Soil Science & the Vietnam Society of Soil Science*  
Community-Based Land Management for Poverty Alleviation in Vietnam

And two new partnerships that began in April 2008 and April 2010, respectively:

- *Canadian Society of Soil Science & the Ethiopian Society of Soil Science*  
ETCANSOL Transfer of Soil Science Technologies for Enhancing Food Security, Rural Development and Environmental Quality in Ethiopia
  
- *Canadian Society of Agronomy & SADP-Nepal* (within Global Project see below)  
Research and Support to Organic Agriculture in Tanahun District of Nepal

Within the ITPP, there is an additional endeavour entitled Global Project – Associations and Professional Exchanges. This component supports activities that engage all project partners (e.g.: – International Partners’ Meetings, gender equality), discrete linkages and exchanges that enhance international connections among agricultural professionals and associations, but are outside on-going project relations, inter-project collaborations, and may also support new partnerships that develop over the term of the Program.



**C. – D. Progress achieved in realizing the goal, objectives and results of the Program, including unanticipated achievements, and an explanation of significant variances**

This section presents a Program summary of achievements, variances and unanticipated results over the five year term of the International Twinning Partnership Program followed by individual project performance reports.

**i. Program Overview – Result Highlights**

- Increased sharing of knowledge, experiences and networks amongst project partners, fostered through two successful International Partners' Meetings, south-south exchanges between Ghana projects and amongst those with land management interests, resulted in increased effectiveness in the delivery of community level programs.
- International engagement in task teams and working groups served to advance gender equality mainstreaming in both developmental and institutional areas, and to strengthen the capacity of AIC and its partners to understand climate change and to respond with appropriate project plans to adapt to or mitigate against climate change.
- Improved project management through formation and adoption of standard tools and systems for financial management, organizational assessment, project monitoring and reporting established expected standards for all partners, and increased their effectiveness as agents of development.
- All partner organizations generated collaborative relations with government departments, research and academic institutes, local agencies and NGOs, and several with other southern agencies and organizations, to foster sustainability of community-level project endeavours.
- Through training sessions, demonstration sites, field days, training of trainers, farmer participatory research, planning and evaluations, project communities accessed a broad range of information and skills development including leadership, gender equality, entrepreneurship, micro-credit management, budgeting, record keeping, market function, crop and animal husbandry, climate change, soil conservation and post-harvest management.
- Participating project communities adopted introduced beneficial management practices and over the project duration experienced increased crop yields of 15-100%. Average annual incomes increased 28-66%. Households with sufficient annual food supply rose and households living in poverty decreased.

**END OF PROGRAM PERFORMANCE REPORT**

**Agricultural Institute of Canada – International Twinning Partnership Program (ITPP) 2006-2011**

COUNTRIES	PRIORITIES	DESCRIPTION	
Ghana (x 2), Tanzania, Sri Lanka, Vietnam, Ethiopia, and Nepal (within Global project)	Food & Nutrition 60% Democratic Institutions & Practices 15% Capacity Development in Environmental Management 15% Gender Equality 10%	This program fosters collaboration between professionals in Canada and developing country counterpart organizations or institutions to identify needs and provide assistance in the agriculture and agri-food sectors, and to optimize the involvement of AIC members and promote the exchange of ideas, skills and information with partner groups.	
EXPECTED OUTPUTS	CUMULATIVE OUTPUTS	VARIANCE & UNEXPECTED RESULTS	
<p>1. Increased organizational skills, knowledge and capacity to plan, deliver and monitor relevant and appropriate programs and interventions, and to expand networks and linkages with national and international organizations.</p>	<p><i>Refer also to individual project performance reports</i></p> <p>1.1 Consultations were conducted with all project partners on: Financial management systems and organizational assessment tools and resources. Tools were developed to support financial management systems (e.g. templates for general ledger, bank reconciliation), and projects received funding support to hire skilled bookkeeping services and/or for training to upgrade in-house skills. Projects demonstrated improvements in financial management practices. The newest partners in Ethiopia and Nepal were able to assume the standard practices from the onset.</p> <p>1.2 All projects completed organizational assessments with several now advanced in taking forward their OA recommendations into strategic planning with emphasis on sustainability and engagement of youth and women.</p> <p>1.3 Project leaders received specific project implementation training including skills development in results based management and Southern Project partners provided their members with skills training to better implement project endeavours. For example, TSAEE delivered workshops in skills development annually to members and through this training and the experience gained in working with communities, members with scientific research backgrounds indicated that they now know how to engage rural farmers to adopt improved agricultural practices (improved extension knowledge) while members in extension reported that they have better access to specialized agricultural information (improved knowledge of ag research innovations). All Southern partners, saw engagement of members in community-level work grow throughout the program term. VIETCANSOL saw member participation rise from 12 to 60.</p> <p>1.4 Enhanced south-south exchanges between the projects in Ghana and amongst the projects with soils and land management interests increased sharing of</p>	<p>Initially, involvement of ESSS members in their OA and in other aspects of getting the project underway was limited due to the effects of the civil service reform process which was happening in the National Agricultural Research System throughout the country and most ESSS members were affected.</p> <p>GSAP found that by involving members from a range of institutions to complement those from the Animal Research Institute they enhanced technology transfer and monitoring of community activities.</p>	

knowledge, experiences and networks amongst project partners. GSAP noted that collaboration with GhIH widened the range of beneficiaries for both organizations. The newest soils and land management partner, ESSS, benefited from exposure to the more mature projects in Sri Lanka and Vietnam by gaining insights on practical technology transfer mechanisms and on collaboration amongst stakeholders.

- 1.5 International Partners' Meetings (IPM) were held in 2007 (Canada) and in 2009 hosted by the SSSSL and the SRICANSOL II project in Sri Lanka. Delegates from all projects (Canadian and Southern partners) and project management staff participated in sharing, exchanging and learning. Training was provided in results based management, and gender equality; partners presented seminars on topics ranging from group facilitation skills to working with multiple partners. IPM sessions identified approaches to ensure viable and strong professional organizations for the future, presented tools for measuring results in such areas as poverty alleviation and food security, and advanced the development goals and objectives for future ITPP programming. Threaded throughout the sessions was discussion of the continuing need to promote gender equality and engage youth for the future. Another theme was the integration of agricultural adaptation to climate change into program and project goals.
- 1.6 South-south ITPP exchanges stimulated vibrant exchanges between southern partners and other southern organizations. GSAP engaged in discussions with Nigeria, Burkina Faso, Cameroon, Benin, Senegal and The Gambia towards the creation of a West Africa Society of Animal Production which will provide a strong guidance to governments in developing policies in the sub-region. GhIH took the lead in bring together representatives from nine Ghanaian organizations to initiate the formation of the Agricultural Institute of Ghana.
- 1.7 On-going exchanges of ideas/information between Canadian and Southern project coordinators strengthened technical capacities, implementation, monitoring and evaluation components.
- 1.8 A professional exchange between the Canadian Society for Horticultural Science, the Canadian Society of Agronomy (CSA) and the Sustainable Agricultural Development Program (SADP) in Nepal resulted in engaging a new Canadian partner organization, CSA, in the ITPP and a new project with a focus on organic agriculture.
- 1.9 Southern partner organizations had representatives on two AIC working groups: Gender Equality Mainstreaming working group and the AIC Climate Change Task Team (ACT2) bringing international contributions to the discussions, exchanging ideas and experiences and increasing capacity to engage in positive interventions.

	<p>1.10 Affiliations were established and maintained with universities, research institutes, Government ministries, and other associations with significant in-kind support/resources to community projects leveraged through these affiliations. For example, GhIH has a close working relationship with the University of Development Studies (UDS) in Tamale, which provided vehicle support for site visits, and resources for plant trials. VIETCANSOL worked closely with various government and NGO agencies which provided support to the project from multi-disciplinary experts and extended broader service connections to project beneficiaries.</p> <p>1.11 National and international contacts and networks contributed to expanding the community-level work conducted by Southern partners. For example, connections through the All Africa Horticultural Congress enabled GhIH to conduct a feasibility study for small scale irrigation projects in Ghana, Burkina Faso, Mali and Niger. TSAEE’s networks and linkages with other Tanzanian NGO’s has extended the reach of the organization throughout the country. Through a “systems” approach to implementing project activities, SRICANSOL strategically identified all agencies and brought together soil scientists, water engineers, health professionals, academics and social scientists to address common issues of land use, productivity, health and nutrition.</p>	<p>Partners found that collaboration with other institutions aided greatly in project effectiveness. For example, VIETCANSOL noted that collaboration between the project and national, provincial, district, commune extension agents and research institute staff aided greatly in both the dissemination of project results and in the access of the project to new technologies, as well as reducing stress on project staff to respond to all requests in a large and diverse coverage area.</p>
<p>2. Increased opportunities for organizations to influence government policy.</p>	<p>2.1 Partner organizations arranged presentations and briefing notes to Ministries and senior government officials, including:</p> <p>GSAP – presentations by two members at the 2010 Ghana Animal Science Association conference plenary session influenced the Deputy Minister of Agriculture’s outlook of animal research and production. The preceding year, GSAP facilitated a workshop on the surge of imported frozen meat and its impact on local products;</p> <p>SRICANSOL – presentation to high level policy makers on the project activities and the effect of BMPs to increase productivity of crops and improve quality of the environment;</p> <p>TSAEE – contracted for mobilization and organization in Misungwi district for malaria control program;</p> <p>VIETCANSOL – eight members participated in a scientific meeting organized by the Vietnam Academy of Agricultural Science and the Scientific Committee in the MARD designed to establish and revise mechanisms on fertilizer management, agricultural land management, and support to farmers to develop and apply new technologies in agricultural production.</p> <p>2.2 ESSS organized and hosted three national workshops: (2009) “Improved Natural Resource Management for Food Security, Poverty Reduction and Sustainable Development”, (2010) Extension focused workshop, (2011) “Natural Resource</p>	<p>During professional exchanges, CSAS members presented seminars on beef and dairy production and feedlot system contributing to GSAP-developed position papers which have influenced government policy in animal production.</p>

	<p>Management for Climate Change Adaptation". Participants included young professionals from regional and federal research institutes, universities and NGOs.</p> <p>2.3 Latest research and sectoral advances were published regularly (annually/bi-annually) in the GhIH Journal of Horticulture, Ghana Journal of Animal Science, Vietnam Soil Science Journal, Ethiopian Journal of Natural Resources, Journals were distributed to government/agriculture ministry officials, academics, researchers, producers and others in the public sector to advance understanding of new technologies, approaches, and issues in the agricultural sector.</p> <p>2.4 Members of partner organizations served on national boards and in senior roles in advanced schools of agriculture: Eight GSAP members, including 2 women, headed government institutions: Animal Research Institute; Faculties of Agriculture, University of Winneba, UDS, University of Science and Technology, Kumasi; and Millennium Challenge Account, Agriculture Sector. Two members served on the national Poultry Development Board and four as heads of Animal Science Departments of the state owned universities.</p> <p>2.6 Projects worked together and developed networks to advance common interests with Governments as evidenced by GSAP's engagement with other regional animal production societies towards the creation of a West Africa Society of Animal Production which will be a strong guidance to governments in developing policies in the sub-region, and GhIH's lead in bring together representatives from nine Ghanaian organizations to form the Agricultural Institute of Ghana.</p> <p>2.7 Government ministries have recognized the capabilities of Southern partner organizations by seeking their input to planning strategies in the resolution of agricultural challenges. In 2009, TSAEE was invited by the Minister of Agriculture to prepare a strategy paper on poverty and agriculture in the Lake Zone. In 2008, the Sri Lankan Minister of Agriculture requested SSSSL to conduct a salinity survey of newly cleared rice fields in Eastern Province. SSSSL received a Letter of Commendation from extension authorities in Puttalama for introducing BMPs to overcome soil salinity.</p>	
<p>3. New technologies are made available to the agricultural community to: i) increase availability, diversity, and storage of food crops; ii) improve livestock practices and production; and iii) improve land management.</p>	<p>3.1 Through training sessions, demonstration sites, field days, training of trainers, farmer participatory research, planning and evaluations, project communities accessed a broad range of information and skills development including leadership, entrepreneurship, micro-credit management, budgeting, record keeping, market function, crop and animal husbandry, soil conservation, and post-harvest management.</p> <p>3.2 A number of projects successfully encouraged farmers to become leaders in project implementation within their communities.</p>	

	<p>GhIH – over 400 direct farmers received training and more than 150 of these facilitated the training of others through Farmer Field Schools;</p> <p>SRICANSOL – trained lead farmers to disseminate BMPs to farmers within the project areas;</p> <p>VIETCANSOL – developed networks of volunteer farmers to serve as “farmer trainers” (40-60% of farmer trainers were women).</p> <p>TSAEE – (informally) the high value placed on the experience of exposure to new ideas and practices fostered a spirit of mentorship between project group members and their neighbours with 73% involved in mentoring others within an average radius of 5 km.</p> <p>SADP-Nepal – involved lead farmers in implementing environmentally sustainable production methods.</p> <p>3.3 Training materials relevant to literacy levels were developed. VIETCANSOL used more illustrative and participative presentation methods to encourage involvement in training, and also provided over 4,000 training materials on crop and vegetable cultivation, animal husbandry technologies and soil augmentation to farmers in project villages. Where language and literacy levels were not sufficient to disseminate information through text, TSAEE used oral communication. An unexpected result was that this practice served to improve language functionality in Kiswahili amongst group members. GhIH successfully used radio broadcasts as a tool to extend information to a broad audience and by their participation in the productions, farmers demonstrated themselves as deliverers of information, as well as recipients.</p> <p>3.4 The reach of projects amongst farming communities grew with the majority of projects (GhIH, GSAP, TSAEE, SFI/VSSS) seeing increases in the number of participating communities over the five year duration.</p> <p>3.5 Collaboration with agricultural extension agents in Ghana, Vietnam and Sri Lanka in delivering training served as a positive sustainability measure.</p> <p>3.6 Information on beneficial management practices (BMPs) were developed and disseminated in project communities. For example, SRICANSOL developed BMPs taking into consideration crop yields and soil fertility limitations. The BMPs were introduced on short and long-term basis and implemented in the most representative fields in each study site with farmer participation. A BMP package of practices was developed for each site.</p>	<p>SRICANSOL was unable to do planned activities in two study areas due to i) difficulty in travelling to one area in the conflict zone during the war, and ii) lack of suitable personnel in another area. However an alternative area was added in recognition of the growth in the fruit sector and to engage more female participation.</p> <p>TSAEE’s use of oral communications in lieu of training materials where literacy levels were insufficient for text held an unexpected result of improved language functionality. In 2006, the group in Lubuga Village knew only their tribal language of Sukuma. By the conclusion of the project they were functional in the use of Kiswahilia in reading, writing and oral communication.</p> <p>SRICANSOL found that adoption of some BMPs was limited by factors outside of the community. For example, paid labourers cultivating fields followed landowners’ instructions in preference to site leaders’ recommendations.</p>
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<p>4. Adoption of innovative and environmentally sustainable agricultural practices, particularly by women.</p>	<p>4.1 All projects conducted baseline surveys in project communities for monitoring adoption of new practices and tracking results on an ongoing basis throughout the term of the program. For example, VIETCANSOL together with Commune leaders farmer and women’s association leaders organized quarterly meetings on village work plans, FPR evaluation, new cultivation technology evaluation, analyzing advantages and difficulties in crop production, presenting project activity reports to farmers and other stakeholders, field days and field visits to help farmers, local staff and extension personnel exchange experiences and select corresponding new crop varieties and new cultivation technologies.</p> <p>4.2 Adoption rates for BMPs are presented in the Cumulative Outputs section for each project. Several examples follow.</p> <ul style="list-style-type: none"> <li>▪ GhIH – Participating farmers applied learned BMPs of: <ul style="list-style-type: none"> <li>- Pricking out (82.7%)</li> <li>- Fertilization (94.0%)</li> <li>- Composting (87.3%)</li> <li>- Mulching (90.6%)</li> <li>- Staking (68.0%)</li> <li>- Sterilization of nursery beds (50%)</li> <li>- Seed treatment (43.3%)</li> <li>- Simple record keeping (51.3%)</li> <li>- Pest and diseases control (88.7%)</li> <li>- Harvesting and post-harvest management (50.7%)</li> <li>- Grading and quality control (60%)</li> <li>- Bucket kit irrigation (83.3%)</li> </ul> </li> <li>▪ SRICANSOL adoption rates for BMPs in specific cropping systems were: <ul style="list-style-type: none"> <li>- 100% for application of N, P and K fertilizer based on target yield in rice-rice cropping system</li> <li>- 40% for application of ZnSO<sub>4</sub> to overcome Zn deficiency</li> <li>- 25% for application of organic manure (rice straw, green manure and cattle manure)</li> <li>- 25% for use of disc plough for land preparation (low due to limited availability of implements)</li> <li>- 100% application of soil amendments (charcoaled paddy husk) in rice-rice cropping system</li> <li>- &lt;10% land preparation in rice-rice cropping system to correspond with onset of rains to save water</li> <li>- 30% for cleaning of drainage canal in rice-rice cropping system depending on availability of funds</li> <li>- &gt;95% for introduction of new high yielding adaptable rice varieties</li> <li>- 80-100% in vegetable cropping system, &lt;10% in rice-rice system for</li> </ul> </li> </ul>	<p>Many partners found that they received requests for important support that was outside their skill areas. For example, VIETCANSOL was approached by their communities for support in animal husbandry. By accessing support from multi-disciplinary experts developed through collaboration with various government and NGO agencies, partners were often able to facilitate responses to broader community needs.</p>
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	<p>preparation of compost - &lt;20% for use of recommended nutrient management package in vegetable cropping system.</p> <ul style="list-style-type: none"> <li>▪ TSAEE youth and women’s group participants valued skills acquired in record keeping, financial management and market function. By the end of the project, all surveyed groups were able to provide a financial summary of their activities. Participants expanded their operations to include new agricultural activities. All groups added an average of one agricultural stream of income to their practice annually. As a result of combined practices in improved agricultural production, value addition and marketing, individuals in groups increased their household income from an average of 25,000 Tsh/month (\$17.85 Cdn) in 2006 to 75,000 Tsh/month (\$53.57 Cdn) in 2011.</li> <li>▪ 61% of the members of women’s groups who received training and support through GSAP applied improved technologies in livestock production such as the use of appropriate housing and feeding.</li> <li>▪ Within the SADP-Nepal project, women farmers comprised approximately 35% of participants practicing the introduced organic farming methods.</li> </ul>	<p>GSAP noted that the over-sowing of fodder seeds produced mixed results. There were small pockets where the forages established well and persisted over several growing seasons. In other areas, seeds were planted too late in the season and/or too deep, newly-established stands were grazed too heavily, and bush fires destroyed established stands.</p>
<p>5. Women, youth and vulnerable groups such as pregnant mothers, new mothers and children, and those affected by HIV/AIDS are provided unique opportunities and assistance to increase household food security.</p>	<p>5.1 All projects gave particular consideration to women, youth and vulnerable groups through either a directed project focus, or by designing activities, materials, timing, and/or location to ensure accessibility.</p> <p>5.2 In collaboration with the Village Farmer Associations and the women’s village associations, VIETCANSOL identified needs, developed programs and conducted training directed at women and youth in the project villages resulting in over 10,000 instances of women and youth participation in training, field days and field visits. Every quarter, village women’s associations and VIETCANSOL organized meetings to discuss interests and problems of women in agricultural production. Follow-up activities were defined on the basis of these meetings.</p> <p>5.3 With guidance from TSAEE, a women’s enterprise network (Mwaviwa Women’s Network) composed of 18 “graduated” TSAEE women’s groups in Ukiriguru has developed a constitution, set goals, and elected leaders. As a result of their experience in the increased skills and abilities gained by working cooperatively, these women identified that maintaining a collective allows greater networking opportunities and gives credibility to them as a formalized body.</p> <p>5.4 The nine original community women’s groups continued with the GSAP project as well as 12 additional groups from the Northern Region and four from the Upper West for a total of 25 communities with 743 women’s group members. These</p>	<p>GSAP noted that the introduction of the micro-credit scheme widened the scope of beneficiaries and the involvement of local NGOs led to horizontal results and higher loan recovery rates.</p>



	<p>groups received training and support in group dynamics, agro-business and micro-credit management, shea-nut processing, animal husbandry, rangeland improvement, fodder and vegetable production.</p> <p>5.5 SRICANSOL adjusted timing of training sessions to accommodate male and female preferences, increasing the ability of women to attend and participate in the programs. GhIH gave priority to women in the distribution of inputs, particularly seeds and in participating in Farmer Field Schools. GhIH ensured that their radio programs were aired in the evenings when more women could listen.</p> <p>5.6 The newest program member, SADP-Nepal, organized 20 days of training in two phases for 31 participants of Nava Kiran Plus (organization for HIV positive members).</p> <p>5.7 Through examination of its own policies and programs, and engaging international partners in the process, AIC served as an example in mainstreaming gender equality. In 2007, an Institutional Analysis (IA) of Gender Equality within AIC was conducted. The exercise resulted in a detailed reflection and assessment of the current state and in a series of seven key recommendations to guide future action. A Gender Equality Task Team (later evolution into the Gender Equality Mainstreaming working group, GEM) with representatives from partner organizations, AIC's board of directors and staff was formed to advance the IA recommendations. A Gender Equality Day at the 2007 IPM, included a Development Roundtable with presenters from different organizations outlining their experiences and addressing gender from both development programming and institutional perspectives. At the 2009 IPM, project coordinators exchanged information on the status of gender-based analysis and training within their organizations and programming and on the availability of in-country funding. In addition, the GEM Committee – International met in person at the 2009 IPM. Through the guidance of a dynamic Gender Equality program officer, the GEM continued to be a vital element in planning, implementing and evaluating a progressive gender mainstreaming approach within all projects.</p>	
<p>6. Improved health of farm household.</p>	<p>6.1 GhIH project team reviewed regional health data for the term of the project and met with regional and local health extension staff. Although it was difficult to measure improved health within the scope of the project, several indicators reflect positive change. For example: Through training and demonstrations, there has been a decreased use, and misuse, of synthetic pesticides and herbicides; there is an increased variety and quantity of fresh vegetables available in production plots and in the market throughout the year with anecdotal comments on improved community health through vegetable consumption; improved income through vegetable production has been used by some project participants to subscribe to</p>	<p>Improved health was a difficult area for projects to measure with quantitative indicators as baseline data was often lacking and/or local health statistics were not accessible. Indirect and qualitative indicators were most frequently applied in assessing this output category.</p>

	<p>the National Health Insurance providing further safeguard for the family's health.</p> <p>6.2 A revolving fund initiated in the 1<sup>st</sup> phase of the GSAP project continued whereby women's groups annually received 200 insecticide treated bed nets, 100 pairs of Wellington boots, and 150 pairs of polyurethane hand gloves. These items served to guard the health of women, and those of other community members. The project also provided the women's groups with vials of anti-snake venom (snake bite is a significant hazard of shea nut collection), which they provided to local health centres, thus increasing their status in the community. 74% of GSAP project participants received training on the prevention of HIV-AIDS, malaria and other communicable diseases. These measures combined to reduce hospital attendance by 62% for beneficiary community households.</p> <p>6.3 Collaboration between GSAP and GhIH is showing increased availability of vegetables and meat in participating communities and improved nutrition of their households.</p> <p>6.4 Two groups of doctors studying kidney problems in the SRICANSOL Mahaveli B site area and also in Polonnaruwa, contacted the SRICANSOL project leader for advice. 35 wells were sampled for water quality and SSSSL continued to work with them to analyze the water quality and help map the data in GIS format. Through the project, abandoned paddy lands were brought under cultivation with the enhanced benefit of reduced mosquito breeding and disease transmission.</p> <p>6.5 24% of surveyed TSAEE group participants described their general health and nutrition as improved, and 76% described as very improved. Women interviewed as improved stove users also reported consistently that they felt their health was improved from the reduced workload of carrying large amounts of firewood long distances</p>	
<p>7. Increased understanding of the impact of HIV/AIDS on the agricultural community.</p>	<p>7.1 GSAP advanced community awareness creation on the prevention of HIV/AIDS, malaria and other common diseases. Over a thousand women and 250 men in project communities attended these workshops. Collaboration between the two Ghana projects through the enhanced south-south support included training of farmers on nutrition, HIV/AIDS, malaria. The enhanced south-south exchange support also exposed Ghanaian partners to TSAEE's Breaking the Silence project where 900 youth were engaged in an HIV/AIDS awareness program.</p> <p>7.2 In 2009, two TSAEE members attended a seminar of HIV/AIDS mainstreaming in the work place organized by OXFAM UK and subsequently established a Gender and HIV/AIDS "desk" to monitor and act on issues arising as they potentially impact or benefit the project.</p>	

	<p>7.3 The newest ITPP member, SADP-Nepal, organized 20 days of training in two phases for 31 participants of Nava Kiran Plus (organization for HIV positive members).</p>	
<p>8. Sustainable partner organizations.</p>	<p>8.1 All southern partner organizations conducted organizational assessments. All found it to be a positive exercise, with good recommendations coming forward from stakeholders for improvement of their organizations. Sustainability, particularly financial, was noted as an area requiring focus from the majority of reviews. Several organizations are now advanced in taking forward their OA recommendations into strategic plans. During the course of the project, GhIH reduced its dependency on project funds for AGM support from 80% to less than 40%.</p> <p>8.2 Partner organizations saw growth in their memberships and in their members' interest in community-level programs. TSAEE Lake Zone increased membership from 116 in 2006 to 218 in 2011, increased active branches from 5 to 12, and developed two more active Zones. Members in all TSAEE branches advanced their knowledge, skills and experience gained in project development, delivery and management. GhIH zonal branches increased from 3 in 2001 to 5 in 2011. Membership increased from 185 (164M, 21F) to 451 (352M, 99F). Over the five years of the ITPP, NISF members participating in the project increased from 12 (9M, 3F) to 60 (40M, 20F). ESSS established five regional nodes, providing the organization with a broader membership base as well as closer connections to work with farming communities.</p> <p>8.3 Partner organizations encouraged the participation of women and youth. GSAP put in place a program of activities aimed at increasing the participation of women in the profession, including a five-member committee to develop a strategic plan for mentoring women scientists. As part of this mentoring program, the project provided ten final year undergraduate students from five public universities with financial support for preparation of their dissertations. Formation of GSAP's tertiary Student Chapters in three public universities with women in leadership positions also encouraged interest in animal sciences amongst female students. GhIH student branches increased from 3 in 2006 to 8 in 2011 with student membership increasing from 63 to 256 (202M, 56F). NISF put in place an organizational gender equality strategy for 2011-2020.</p> <p>8.4 All partner organizations worked collaboratively with government departments, research and academic institutes, local agencies and NGOs to foster sustainability of community-level project endeavours. SRICANSOL developed a "systems" approach which strategically identified all relevant agencies and brought together soil scientists, water engineers, health professionals, academics and social</p>	

	<p>scientists to address common issues of land use, productivity, health and nutrition. The concept and methodology were widely accepted as a model for future endeavours. Through training and material assistance, GSAP facilitated partnerships between women’s groups and local NGOs which took on responsibility for shea butter processing and marketing activities at the end of the project term.</p> <p>8.5 Several partner organizations formed alliances/collaborations with other southern agencies and organizations which will serve to strengthen sustainability. For example, GHIH took the lead in discussions with nine other agricultural organizations to form the Agricultural Institute of Ghana.</p>	
EXPECTED OUTCOMES	CUMULATIVE OUTCOMES	VARIANCE & UNEXPECTED RESULTS
<p>1. Increased food security and food access for poor communities and particularly for those impacted by HIV and AIDS.</p>	<p>1.1 GHIH: In four project communities there was a two-fold increase in vegetable production yield as compared to non-project villages. Availability of fresh vegetables rose from 5 months to nine months into the dry season. The diversity increased from 7 locally produced vegetables to 12. Post-harvest losses reduced by 20% over the 5 years due to improved harvesting and post-harvest handling techniques. Consumption of vegetables has increased 3-fold.</p> <p>1.2 GSAP: The integrated system practiced (livestock/sheanut) ensures that livestock serves as buffer mechanism to the food security needs when the yield of the sheanut crop is poor. 98% families of project beneficiaries experienced increased food security and improved nutrition through diversification aspects of the project.</p> <p>1.3 TSAEE: Through improved agricultural production training from TSAEE with emphasis on proper spacing, manure/organic fertilization, and proper crop and variety selection, average yield increased amongst groups: Paddy (37-81%); Tomato (40-75%); Maize (40-100%) and Cassava (18-63%). Food planning was further advanced through TSAEE training and promotion of improved food storage practices. Rooms were included in all 69 modern homes constructed by project participants that allow for storage of 1,000 kg of food crops per home (total of 69,000 kg storage). This provides for storage of excess group harvest shares and individual harvest excess to ensure sufficient food access through the November to February period of the hungry months. The near universal period of January-March food insecurity (1-2 meals/day) experienced in 2006 was described in 2011 as being a food secure period.</p> <p>1.4 SRICANSOL: Socio-economic surveys to evaluate food access and availability for poor communities were completed for each site. Results demonstrated significant</p>	<p>TSAEE, in particular, worked in communities that are impacted by HIV/AIDS, but did not require status identification. All participants were treated equally and received equal benefits. PLWHA were assumed to be present at a proportion of 5.6% that matches the Tanzanian national HIV/AIDS prevalence rate.</p>

	<p>yield increases (15-30% general and 40-60% rice) in BMP demonstration plots and a relative increase of food production over previous years.</p> <p>1.5 VIETCANSOL: Over the five years of the project term, crop yields increases (in comparison to farmers' practices) as a result of project interventions were assessed as:</p> <ul style="list-style-type: none"> <li>- new rice variety and rice intensive technologies increased rice yield by 19-46%,</li> <li>- new corn variety and corn intensive technologies increased spring corn yield by 23-42%,</li> <li>- sweet potato cultivation technologies increased sweet potato yield by 31-39%,</li> <li>- tea intensive technologies increased tea yield by 32%,</li> <li>- sugar cane cultivation technologies increased sugar can yield by 24%</li> <li>- new cassava variety and cultivation increased yield by 41-62%</li> <li>- composted farmyard manure for winter vegetables increased vegetable yield by 34-42%,</li> <li>- new soybean variety cultivation technologies increased yield by 34-46%,</li> <li>- peanut cultivation technologies increased yield by 30-32%.</li> </ul> <p>Prior to the project most project village households had 2 meals/day, at conclusion 3 meals/day was common. Average food per capita of core project villages increased 16-33%. Animal protein consumption increased from an average of 1 day/week to 2 days/week. Households with sufficient annual food supply rose 28-48%.</p>	
<p>2. Rural household income has increased.</p>	<p>2.1 GhIH: Due to the short rainy season of the Upper West Region and lack of employment opportunities, many farmers become redundant after harvesting their crops until the next farming season. As a result, many people migrate temporarily and some left permanently. With the introduction of DSVP, many community members now have a source of income and engagement during the dry season. 98% of survey respondents indicated that there were positive changes in their lives as a result of the project. 70% of respondents appreciated the project for providing income to purchase household needs, 22.7% appreciated the project for providing employment during the dry season and 20% for reducing rural-urban migration. 39.3% of survey respondents said that their income has improved. Increased income is used to buy staple foods, farm inputs, to subscribe to National Health Insurance, pay school fees, and purchase household goods and building materials.</p> <p>2.2 GSAP: Increased sheanut pick normally brings about market gluts and forces down prices offered to women. This has not been the case as the processing equipment provided to the women's groups enabled the women to process more nuts into butter to add value for better prices. Activities undertaken to enhance livestock and poultry health such as vaccination of small ruminants and poultry against common</p>	

	<p>communicable disease, reduces mortality and increases productivity to enhance income of the women. 84% of women beneficiaries were able to meet household needs as a result of profit made from farming, trading and sale of shea nuts and butter.</p> <p>2.3 TSAEE: As a result of combined practices in improved agricultural production, value addition, financial management, and marketing, group participants were able to increase their household income from an average of 25,000 Tsh/month (\$17.85 Cdn) in 2006 to 75,000 Tsh/month (\$53.57 Cdn) in 2011. When the average 2011 monthly income of participants is considered as a daily average of 2,000-3,333 Tsh/day (\$1.33-\$2.22 US) it can be stated that 100% of participants in the project have secured incomes high enough to be considered above the international poverty line for least developed countries of \$1.25 US/day. Income increases were invested by groups and their individual participants to attain tangible goals in property and services amongst all groups that total 445,152 Tsh (\$317,965 Cdn) as of 2011. Increases in average individual monthly income equate to +66.7%. When this percentage value is applied against the value of tangible goals achieved, the value of tangible goals purchased as based strictly on portions of income increases can be stated as equaling 296,916,384 Tsh (445,152,000 Tsh x 0.667) or \$212,083 Cdn. Over the term of the project, the dollar value of CIDA support budgeted and spent, from rural beneficiary engagement to organizational capacity building was \$208,000. This equates to a return after 5 years of 102% or \$1.02 Cdn for every \$1 Cdn invested by CIDA that is generated through agro-based income generating practices amongst rural women and youth.</p> <p>2.4 SCRICANSOL: Increased farmer income was inferred by yield increase and the fact that in most study sites, farmer attitudes have changed and they are more positive toward project activities. Unfortunately, specific increases in income often were not quantified as farmers were reluctant to divulge their income to project leaders. However, in Ambaganga (Polonnaruwa District) data was obtained to demonstrate rice yield increases resulted in farmers with monthly income above Rs 10,000 increased from 12-25%. Signs of increased affluence include improved housing, purchase of household items and purchase of cattle.</p> <p>2.5 VIETCANSOL: (see project outcomes for percentage increases attributed to specific BMP adoption) In the three core villages, yearly average income per capita rose 28-36%. Households living in poverty reduced by 47-52%.</p> <p>2.6 SADP-Nepal: over the 18 month period of the project, 12 community members (6F, 6M) increased their monthly income from NRs 1500 to NRs 4500 through involvement in the demonstration farm. Three farmers increased their monthly</p>	
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	income from NRs 1000 to NRs 3000 per month through marketing products.	
<p>3. Successful environmentally sustainable agricultural practices are implemented.</p>	<p><b>Refer also to Section G. Assessment of Environmental Results</b></p> <p>3.1 For all projects, all interventions are considered from the perspective of their environmental impact and environmental sustainability.</p> <p>3.2 GhIH: The project focused on integrated soil and water management approaches as well as integrated pest and disease management for implementing successful environmentally sustainable practices. The combination of compost use and mulching increased soil moisture level and decreased the effect of soil moisture stress on plants especially during flowering and fruiting of vegetables, reducing flower abortion and resulting in higher yields. Good nursery practices, organic pest and disease control measures resulted in fewer reported cases of pest disease problems. 28% of beneficiary farmers observed better crop growth; 16% linked the sustainable environmental practices to improved soil fertility; 10% attributed sustainable environmental practices to reduction in pest and weeds and 16.7% could link these practices directly to higher crop yields. 56% of participating farmers reduced the quantity of chemical fertilizers by at least half since 2006.</p> <p>3.3 GSAP: Over 60% of women used environmentally sustainable practices, such as the use of livestock manure for vegetable farming, appropriate housing and feeding of livestock. Through project training interventions, 60% of project communities experienced lower incidence of bush fires. Reinforcing the under-growth of the shea trees with forage legumes and intensive fodder production reduced the preferential grazing of specific indigenous forage species which are at risk of extinction and thereby enhanced biodiversity.</p> <p>3.4 ETCANSOL: The output documents from the workshops form the basis for developing new agronomic recommendations, strategies for climate change mitigation, as well as providing the potential for connecting with emerging opportunities, e.g. Ethiopia’s Growth and Transformation Plan and the Climate Resilient Green Economy initiative. Particular challenges identified were those of the role of ETCANSOL in contributing to positive resolutions to fertilizer management, and the introduction of conservation agriculture, such as minimum/zero tillage, crop residue management including opportunities and methods for composting.</p> <p>3.5 TSAEE: (See project outcomes for specific BMPs adopted by participants that improved production and environmental sustainability). All surveyed participants reported that they employ the practices of their group on their personal farm sites. A total of 509 acres of agricultural land is under production practices with BMPs on both group and individual farms. Ten of the 35 groups also adapted agro-forestry</p>	<p>While TSAEE was able to maintain life improvement gains amongst participating groups, an increasing need for short, medium and long-term weather and climate change planning</p>

	<p>into their group activities. 2,455 trees were planted through TSAEE training in nursery development and seedling establishment. TSAEE has further integrated agro-forestry practices with improved portable stove training to foster a viable means of jointly increasing biomass supply while simultaneously reducing wood biomass consumption. Women interviewed as improved stove users also reported consistently that they felt their health was improved from the reduced workload of carrying large amounts of firewood long distances.</p> <p>3.6 SRICANSOL: Composting of agricultural, farmyard and household wastes were adopted by 80% of participating famers. Compost application improved soil conditions in general and especially water holding capacity, which farmers say is very evident during drought as crops in compost applied plots withstand water stress while crops in other plots withered. Salinity development in rice fields was reduced through improved drainage conditions in major irrigation schemes. Abandoned paddy lands were brought under cultivation with the enhanced benefit of reduced mosquito breeding and disease transmission.</p> <p>3.7 VIETCANSOL: After 5 years, applying cultivation and balanced fertilizer application technologies on sloping land and paddy land, the result was reduced soil erosion on sloping land and improved soil fertility and moisture on sloping land and paddy land (increased pH, organic matter, available P and K, CEC and an increase of 6-15% in soil moisture content). On lands that were largely degraded and limited in agricultural productivity, by applying innovative land and crop management BMPs, using composted local organics and agricultural production technologies to improve soil fertility and crop yield, farmers have increased the value of their land through sustainable land management.</p> <p>3.8 GLOBAL: The AIC Climate Change Task Team (ACT2) has strengthened the capacity of AIC and its partners to understand climate change and to respond with appropriate program and project plans to adapt to or mitigate against climate change. Under the guidance of the ACT2, country specific resource handbooks for each participating ITPP country were produced. Information includes the use of introductory principles in climate change, current and climate change projected crop calendars, projected climate impacts and appropriate responses in sustainable agriculture, introductory participatory adaptation tools, and links to country specific reports of firmest scientific and organizational standing. All handbooks were reviewed amongst ITPP partners to ensure the validity of the information. Wider dissemination of the handbooks resulted in the use of the Tanzania Handbook by Oxfam Great Britain in Tanzania.</p>	<p>for effective cropping was an unexpected need identified as a future capacity building priority.</p>
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<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>4.1 GhIH: Collaborated with 26 institutions including five public universities, headed the formation of the Horticultural Advisory Council, and with GSAP is leading the formation of the Agricultural Institute of Ghana. Latest research and advancements in horticulture are published regularly in the GhIH Journal of Horticulture which is distributed to government officials, academics, researchers, producers and others in the public sector. GhIH is chartered to offer advice and consultancy services to government, private entrepreneurs and other interested practitioners. It also advises on the curriculum for the training of horticulturists in Ghana.</p> <p>4.2 GSAP: Through collaborations with other West African animal science bodies, GSAP is working to establish the West African Society of Animal Production which will be a strong guidance to government in developing policies in the sub-region. In cooperation with GhIH, GSAP is working to develop the Agricultural Institute of Ghana for a strong and united voice on agricultural issues affecting the country. GSAP members hold respected senior positions on National Boards, Research Institutes, academic institutions, and in government programs. Members published in various internationally recognized journals and in 7 issues of GSAP Journal, and the Ghanaian Journal of Animal Science.</p> <p>4.3 ETCANSOL: Through participation in ESSS workshops, policy makers have shown interest in natural resources conservation and enhancement. Linkage between ESSS and the Sustainable Land Management (SLM) Platform helped ESSS to collaborate with key stakeholders in piloting natural resource management technologies at selected communities or watershed levels. (SLM is hosted by the Ministry of Agriculture aimed at a watershed based intervention for scaling up existing natural resource management technologies, as well as carbon accounting for climate mitigation.)</p> <p>4.4 TSAEE: TSAEE expanded its range of programming to work with multiple development partners (refer to project outcomes for complete listing) and continued cooperation with other NGOs in knowledge sharing and project implementation. These networks and linkages extended TSAEE's reach throughout the country. Expanded opportunities for TSAEE to participate and contribute to local and regional agricultural planning: National and District planning for agricultural sector in Singida (Central Zone); annual regional planning sessions in Tabora (Western Zone); District agricultural development planning on Misungwi, Ukerewe, and Magu (Lake Zone). The cumulative result is that TSAEE is a recognized agency amongst NGOs, local and regional Tanzanian government that can effectively improve lives in rural communities.</p>	
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	<p>4.5 SRICANSOL: With the signing of an MoU with the Department of Agriculture, a national database was set up at the Natural Resource Management Centre. This soil and BMP data base developed by SSSSL will be managed and sustained by the Centre. The Society continues to gain visibility and credibility in the area of resource management and is frequently the first agency contacted for expertise in the area of soil and water quality related to agriculture.</p> <p>4.6 VIETCANSOL: Memorandum of agreement signed with MARD to collaborate at the national level in order to develop and transfer new technology to farmers. Strengthened collaborations to apply and disseminate new technologies, including those with provincial and district extension agencies, communes, villages, Maize Research Institute, Animal Husbandry Research Institute, Agricultural University No 1 and Tuber Crop Research Centre. Eight NISF members participated in a scientific meeting organized by the Vietnam Academy of Agricultural Science and the Scientific Committee in the MARD designed to establish and revise mechanisms on fertilizer management, agricultural land management, and support to farmers to develop and apply new technologies in agricultural production. Contributed to decision-making that will help determine the direction in development of agriculture in Vietnam, particularly in poor, northern regions with hilly farmland.</p> <p>4.7 SADP-Nepal: Participated in a meeting called by the Nepal Bureau of Standard and Metrology in forming a steering committee for the preparation of guidelines on good agricultural practice for Nepal including organic farming.</p> <p>4.8 GLOBAL: Through active involvement on the GETT, GEM and ACT2, participation in determining focus areas for the IPM, and through discussions, seminars and training within partner organizations and with beneficiaries, partner organizations are engaged with issues that influence the scope of development work and advance their knowledge and capabilities to influence policy and implementation.</p>	
<p>5. Women are active participants and beneficiaries of agricultural endeavours.</p>	<p><b>Refer also to Section F. Analysis of Gender Equality Results</b></p> <p>5.1 GhIH: Women gained confidence and assumed leadership through Training of Trainers (ToT) roles, and there is an increased acceptance of female farmers in leadership roles to facilitate/instruct FFS sessions. 45% of all FFS participants were women and at least a third of all ToT participants were also women. This high percentage of women engaged in the project was made possible because women and men were equally involved in planning and scheduling the training programs. Flexible days were selected for instance village market days on which women were very busy were largely avoided. Women identified increased</p>	

	<p>interaction/collaboration with other farmers and stakeholders as a significant benefit gained through participation in the project.</p> <p>5.2 GSAP: To address the low female participation in the animal agriculture profession, the project put in place a program of activities aimed at increasing the participation of females in the profession (refer to project outcomes for details). A dissertation entitled “The impact of GSAP-CSAS project on women beneficiaries and its contribution to household food security in Northern Ghana” by Lantana Munkaila, a GSAP member and an Assistant Research Scientist, ARI, indicated that, “There has been a positive impact on the number of animals reared in the study areas as a result of the project interventions...the GSAP-CSAS project has played a significant role in the development of the women beneficiaries and their households. Because these women meet pressing needs of their households, they are usually respected by their husbands. They are consulted by their husbands before certain household decisions are arrived at. The men in the study area testified to the fact that the women contributed significantly to both the nuclear and extended families as a result of the intervention.” Linkages with gender specialists and organizations dealing with women’s issues such as Women in Agricultural Development of MoFA and the Ministry of Women and Children’s Affairs were strengthened. Education of children, particularly girl children, improved by 87% as women beneficiaries were able to pay school fees.</p> <p>5.3 TSAEE: Women represented 67% of the participants in all groups and 53% of youth group participants. Surveyed group participants stated that they feel women are regarded more positively in their homes and communities as a result of taking part in the project. During an evaluation session in Ukerewe to which a village elder (male) attended, he was very clear to state that many of the changes in the community were a result of the efforts of women within the TSAEE group. The result of both increased income amongst women participants and increased cooperation amongst men and women in economic decision making has improved household life (reduced economic pressure and conflict) for project participants.</p> <p>5.4 SCRICANSOL: Women were very involved in the awareness programs and training sessions (50 – 73% female participation). Women participated in the discussions, and voiced their views on agricultural and production issues related to family sufficiency. Most of the agents in the extension system are women and they are directly engaged in the project activities and gained improved technical knowledge through the project. An active SSSSL student chapter encouraged women in agricultural studies. The number of female students entering the Faculty of Agriculture at Peradenya University increased by 30% during the project term.</p>	
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	<p>5.5 VIETCANSOL: Women were active participants in project activities: 47-52% of total participants in training; 46-49% of total participants in FPR; 46-51% of total participants in field visits and field days; 35-40% of total participants in community activities are women (previously only 15-25% of participants in community activities were women). Women farmers applying new technologies in agricultural production in project villages increased by 48-75%. Through participating in project activities and FPR, women's associations are increasing their capacity to lead women's groups in applying new technologies, and in establishing and managing credit funds to help women to develop household economies. Women's associations in 3 core villages organized training workshops on gender equality in the family, in agricultural production and in community activities in the village. The NISF developed an organizational gender equality strategy for 2011-2020. By 2020, the goals are to have women in 35% of leadership positions, 30% of women holding advanced degrees, 45% of women members participating in training programs, and 35% of total scientific research subjects and project presided by women.</p> <p>SADP-Nepal: 13 women practiced organic farming on their farms and increased their income through the sale of seedlings.</p> <p>GLOBAL: Through examination of its own policies and programs, and engaging international partners in the process, AIC served as an example in mainstreaming gender equality. Through the guidance of a dynamic Gender Equality program officer, the GEM continued to be a vital element in planning, implementing and evaluating a progressive gender mainstreaming approach within all projects.</p>	
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EXPECTED IMPACT	ACTUAL IMPACT
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<p>People in rural project communities in the ITPP locales are benefitting from improved <b>economic</b> conditions: increased income through improved crop yields, animal husbandry, marketing and value added processing allowed for increased capacity to meet household needs, reduction in the number of households living in poverty, increased purchase of household items, purchase of livestock, building of better houses, acquisition of health insurance, payment of children’s school fees, improved family nutrition, reduced chemical input costs, and increased local employment.</p> <p>People in rural project communities in the ITPP locales are benefitting from improved <b>environmental</b> conditions: decrease in pesticide use, improved soil conditions, broader acceptance of BMPs with increased crop yields, reduced bush burning and decreased volume of CO<sub>2</sub> emissions from the burning of biomass, protection of at risk indigenous forage species, reduced soil erosion, and farmers have increased the value of their lands through sustainable land management practices.</p> <p>People in rural project communities in the ITPP locales are benefitting from improved <b>social</b> conditions: increased employment and reduced migration, younger people are farming, local leadership developed through the formation of groups and associations, improved status of women through increased income, increased presence and influence of women in community development and decision-making and in household decision-making, equitable benefit through project participation, and improved nutrition and family health.</p>

## **ii. CSHS-GhIH – Strengthening the Impact of Horticulture on Social Development in Ghana**

This phase II of a continuing project strengthened the institutional capacity of the Ghana Institute of Horticulturists to serve as a credible authority for the promotion and development of horticulture as an important sector in the economy of Ghana with a focus on promotion of dry season vegetable production with five target communities in the Upper West Region of Ghana. The communities were: Busa (Wa East district), Babile (Lawra District), Nandom (Lawra District), Karni and Piina (Lambusie-Karni District). The project objectives included:

- Extending valuable information to farmers through farmer field schools.
- Enhancing food and nutrition security through increased production and consumption of vegetables.
- Increasing the participation of women in GhIH and strengthen the leadership role of women at the vegetable production sites.

### **Result Highlights**

- The project trained over 400 farmers representing 53% of all farmers at dam sites, and over 150 of these trained farmers are now facilitating the training of others.
- Over 70% of participating farmers reported increases in yield and income. Many of the trained farmers now take up Dry Season Vegetable Production (DSVP) as a means of income generation/employment and not just as a means of subsistence as was the case when the project was first initiated.
- Female farmers are increasingly accepted in leadership roles to facilitate/instruct farmer field school sessions.
- Producers gained a better understanding of the quality demanded by processors, traders and consumers. Through project facilitated networking, several major vegetable users in Wa established direct contact with farmers for their supply of fresh vegetables.
- In collaboration with GSAP, GhIH initiated the formation of the Agricultural Institute of Ghana by bringing together stakeholders representing nine agricultural bodies in Ghana and the Executive Secretary of the Millennium Development Authority.

**END OF PROGRAM REPORT BY PROJECT**

**April 1, 2006 – May 15, 2011**

<b>PROJECT:</b>	<b>Strengthening the Impact of Horticulture on Social Development in Ghana</b>	<b>COUNTRY:</b>	<b>Ghana</b>	<b>PARTNERS:</b>	<b>Ghana Institute for Horticulture (GhIH), Canadian Society for Horticultural Science (CSHS) &amp; AIC</b>
<b>Expected Outputs</b>		<b>Cumulative Outputs</b>			<b>Variance</b>
1. Increase in use of compost and organic pesticides and reduction in the use of inorganic inputs.		<p>2.1 Over the five year period, the number of farmers who learned the BMP on composting from training workshops increased from 5% to 59%. In addition, farmers who learned composting BMP from fellow farmers increased from 12 to 30%. GhIH produced radio broadcasts which included information on the preparation and use of compost. As a result of GhIH training workshops and information, the use of compost in vegetable gardens in project communities was at 98% in April 2011.</p> <p>2.2 56% of farmers have reduced their use of inorganic fertilizers by more than half of what they used in 2006.</p> <p>2.3 Farmers also learned the BMPs of the use of neem extract, soil sterilization and mulching through GhIH training workshops and from volunteer farmers trained by GhIH, further reducing the use of inorganic inputs.</p>			<b>Variance</b>
2. Increased adoption of improved dry season vegetable production techniques by farmers, especially by women.		<p>2.1 Participating communities increased from 4 in 2006 to 7 in 2011. Over 400 direct farmers received training through the project, representing 53% of all farmers at the sites. More than 150 of these trained farmers are now facilitating the training of others.</p> <p>2.2 Through collaboration with MoFA, ten Ag Extension Agents (AEAs) together with farmer participants from the Water Users' Associations received training in vegetable production through GhIH in training events held twice/year for 4-6 days with both field and classroom training. These trained individuals then conducted the Farmer Field Schools (FFS) in each community.</p> <p>2.3 Farmer Field Schools (FFS) increased from 12 farmers/community to 20 with an emphasis that the additional number should mainly be women.</p> <p>2.4 Training workshops were identified by 81% of direct beneficiaries as the most influential method of gaining information. The collaboration of MoFA staff (AEAs) and GhIH members in delivering the workshops was a positive sustainability measure.</p>			

	<p>2.5 During the five years of the project, farmers applied learned BMPs of:</p> <ul style="list-style-type: none"> <li>- Pricking out (82.7%)</li> <li>- Fertilization (94.0%)</li> <li>- Composting (87.3%)</li> <li>- Mulching (90.6%)</li> <li>- Staking (68.0%)</li> <li>- Sterilization of nursery beds (50%)</li> <li>- Seed treatment (43.3%)</li> <li>- Simple record keeping (51.3%)</li> <li>- Pest and diseases control (88.7%)</li> <li>- Harvesting and post-harvest management (50.7%)</li> <li>- Grading and quality control (60%)</li> <li>- Bucket kit irrigation (83.3%)</li> </ul> <p>2.6 GhIH disseminated information through:</p> <ul style="list-style-type: none"> <li>- Radio programming</li> <li>- Farmer field schools</li> <li>- Training of trainers</li> <li>- Training materials relevant to literacy levels</li> <li>- Community drama</li> <li>- Focus group discussions</li> </ul> <p>2.7 Women farmers were given priority in the distribution of inputs, especially vegetable seeds. At the village level, women are known to be sole processors and custodians of vegetable seeds and considered to be able to store seeds better.</p> <p>2.8 An evaluation of radio broadcasts (in Dagari language) was conducted with 60 direct and 60 indirect (non-project community) farmers to ascertain the extent to which radio as an ICT tool has influenced or could influence transfer of technologies to target groups and identify ways to improve programming. About 85% of farmers interviewed indicated that they had radio sets. All the respondents agreed that they benefited from the technologies discussed on the radio. Survey showed at least 25% increased application of DSVP technologies as a result of the radio broadcasts. Also learned that evening broadcasts allow more women to listen to the programs. By participating in the productions, farmers demonstrated themselves as deliverers of information, as well as recipients.</p>	
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<p>3. Increase in the quality and quantity of vegetables produced.</p>	<p>3.1 The majority of participants are now cultivating more than one vegetable. Tomato, pepper, okra and onions are the predominant crops. Vegetables are grown in combinations through intercropping, succession planting or by including grains. Other vegetables such as cabbage, pumpkin, lettuce, green pepper, garden eggs, cucumber and leafy vegetables are also grown by some producers.</p> <p>3.2 65% of beneficiary farmers have reported better germination due to improved seeds and better production practices.</p> <p>3.3 Improved physical quality of tomatoes and chili pepper: Over 60% of beneficiary farmers have seen improved seeds and bigger and more succulent fruits which store for 4-5 days longer.</p> <p>3.4 Beneficiary farmers have noted at least 50% increase in the quantity of vegetables produced per unit area.</p> <p>3.5 Female farmers in Babile who began producing quality onion seeds in 2006 are still producing in 2011. This is a lucrative income generating activity (a 600 ml bottle of seeds sells for 40 cedis, approx. \$27 Cdn, and each farmer sells an average of 35 bottles).</p>	
<p>4. Improve the management of activities by GhIH.</p>	<p>4.1 GhIH zonal branches increased from 3 in 2001 to 5 in 2011. Membership increased from 185 (164M, 21F) to 451 (352M, 99F). Student branches increased from 3 in 2006 to 8 in 2011 with student membership increasing from 63 to 258 (202M, 56F).</p> <p>4.2 The selection of different zonal locations to host the AGM indicated increased capacity of zones to organize such events.</p> <p>4.3 GhIH reduced from 80% to less than 40% the funding from CIDA that supports its AGMs.</p> <p>4.4 A membership newsletter is circulated by hard copy or by e-mail to all members. Members and public now are also able to access information on GhIH through the Institute's website which was launched in 2009.</p> <p>4.5 A popular GhIH-initiated seminar on scholarly published papers was absorbed by the Faculty of Agriculture at UDS (sustainability of program).</p> <p>4.6 Through capacity building, GhIH members have accessed donor support through their places of employment, e.g. – World Bank project on solar dryers at KNUST, US-AID exchange with Texas A&amp;M University and University of Kentucky mentorship programs, chili pepper project at UDS on Global GAP funded by GTZ).</p>	

<p>5. Increase capacity to develop appropriate strategies to enhance the horticultural industry in Ghana.</p>	<p>5.1 GhIH submitted a communiqué after every AGM to relevant government agencies outlining issues concerning the development of the horticultural industry and with remedies to address concerns.</p> <p>5.2 Government officials, in particular from the Ministry of Food and Agriculture (MoFA), have attended GhIH AGMs and delivered key note addresses.</p> <p>5.3 Latest research and advancements in horticulture are now published regularly in the GhIH Journal of Horticulture which is distributed to government officials, academics, researchers, producers and others in the public sector.</p> <p>5.4 Each year, GhIH has presented National lectures on topics including: Cultivation of <i>Artemisia annua</i> and its use as a tea to treat malaria; The importance of Moringa; Better health through the consumption of hygienically produced and handled fruits and vegetables. (In 2010/11, the lectures were presented by 2 women).</p> <p>5.5 Through collaboration with GSAP, professional exchanges (IPMs 2007 and 2009), south-south exchanges (Tanzania, Burkina Faso), conferences (Kenya) and participation in AIC working groups (GETT and GEM), GhIH has expanded its professional contacts and networks while learning and applying new components to its community outreach.</p> <p>5.6 Through connections made at the All Africa Horticultural Congress (Kenya, Sept. 2009), the northern zone of GhIH secured a contract from AVDRC (the World Vegetable Centre) to do a feasibility study for small scale irrigation projects in Ghana, Burkina Faso, Mali and Niger.</p> <p>5.7 In collaboration with GSAP, GhIH initiated the formation of the Agricultural Institute of Ghana by bringing together stakeholders representing nine agricultural bodies in Ghana and the Executive Secretary of the Millennium Development Authority.</p>	
<p>6. Improve health for farm households through the consumption of vegetables.</p>	<p>6.1 Through trainings and demonstrations, farmers decreased their use, and misuse, of synthetic pesticides and herbicides.</p> <p>6.2 Increased variety and quantity of fresh vegetables are available in production plots and in the market in both wet and dry seasons. Anecdotal comments provided on improved community health through increased vegetable consumption.</p> <p>6.3 Improved income through vegetable production has been used by some farmers to subscribe to National Health Insurance.</p>	<p>Data analysis is incomplete as improved health was difficult to measure within the scope of the project. The project reviewed regional health data for the term of the project and met with regional and local health extension staff.</p>

<p>7. Increase participation of women in decision-making.</p>	<p>7.1 Over the project term, more women demonstrated increased interest in training programs and in the formation of groups. There was an increased acceptability of women farmers in leadership roles to facilitate/instruct FFS sessions.</p> <p>7.1 In the majority of Water Users’ Associations, males still dominate in leadership positions with the exception of Karni where females occupy 11 of the 20 leadership positions.</p> <p>7.2 GhIH conducted a review of its constitution to better address gender equality and also reviewed the process of selection of participants in exchanges to increase opportunities for female members.</p> <p>7.3 Women represent 22% of the full membership of GhIH an increase from 21 female members in 2005 to 45 in 2011.</p> <p>7.4 Representation of women members at GhIH AGMs increased from 17 at the 6<sup>th</sup> AGM, 22 at the 7<sup>th</sup>, 27 at the 8<sup>th</sup> and 42 at the 9<sup>th</sup>. Approx. 33% of participants in the 10<sup>th</sup> and 11<sup>th</sup> AGMs were women.</p> <p>7.5 Female members on Council increased from 2 in 2006 to 5 in 2011 (12.5% and 31.3% respectively). Within the same period, 2 out of the 3 GhIH National Presidents were female. Composition of GhIH committees in 2011:</p> <ul style="list-style-type: none"> <li>- Education, research and publication (5M, 1F)</li> <li>- Finance (3M, 4F)</li> <li>- Membership, welfare and publicity (5M, 1F)</li> <li>- Professional practice and disciplinary (6M, 1F)</li> </ul> <p>7.6 Out of 9 speakers for the 5 national public lectures organized over project duration, five were female.</p>	
Expected Outcomes	Cumulative Outcomes	Variance
<p>1. Increased food security and food access for poor communities and particularly for those impacted by HIV/AIDS.</p>	<p>1.6 In four project communities there has been a two-fold increase in vegetable production yield as compared to non-project villages.</p> <p>1.7 Availability of fresh vegetables has risen from 5 months to nine months into the dry season. The diversity has increased from 7 locally produced vegetables to 12.</p> <p>1.8 Post-harvest losses have reduced by approx. 20% over the 5 years due to improved harvesting and post-harvest handling techniques.</p> <p>1.9 Consumption of vegetables has increased 3-fold. Information on handling, preparation and cooking disseminated by GhIH radio broadcasts, and increased availability and diversity of vegetables in the market place are credited with influencing consumption.</p>	

<p>2. Rural household income increased.</p>	<p>2.1 Due to the short rainy season of the Upper West Region and lack of employment opportunities, many farmers become redundant after harvesting their crops until the next farming season. As a result, many people migrate temporarily and some left permanently. With the introduction of DSVP, many community members now have a source of income and engagement during the dry season.</p> <p>2.2 98% of survey respondents indicated that there were positive changes in their lives as a result of the project. 70% of respondents appreciated the project for providing income to purchase household needs, 22.7% appreciated the project for providing employment during the dry season and 20% for reducing rural-urban migration.</p> <p>2.3 Many of the trained farmers now take up DSVP as a means of income generation/employment and not just as a means of subsistence as was the case when the project was first initiated. 39.3% of survey respondents said that their income has improved.</p> <p>2.4 Increased income is used to buy staple foods, farm inputs, to subscribe to National Health Insurance, pay school fees, and purchase household goods and building materials.</p> <p>2.5 Input costs were reduced through farmers producing their own seeds, increased use of organic compost/reduced use of chemical herbicides/pesticides.</p>	
<p>3. Successful environmentally sustainable agricultural practices are implemented.</p>	<p>3.1 The project focused on integrated soil and water management approaches as well as integrated pest and disease management for implementing successful environmentally sustainable practices.</p> <p>3.2 The combination of compost use and mulching increased soil moisture level and decreased the effect of soil moisture stress on plants especially during flowering and fruiting of vegetables, reducing flower abortion and resulting in higher yields.</p> <p>3.3 Good nursery practices, organic pest and disease control measures resulted in fewer reported cases of pest disease problems. 28% of beneficiary farmers observed better crop growth; 16% linked the sustainable environmental practices to improved soil fertility; 10% attributed sustainable environmental practices to reduction in pest and weeds and 16.7% could link these practices directly to higher crop yields.</p> <p>3.4 56% of participating farmers reduced the quantity of chemical fertilizers by at least half since 2006.</p> <p>3.5 BMPs practiced by rural beneficiaries after training included:</p> <ul style="list-style-type: none"> <li>- Crop-Livestock/poultry integration</li> <li>- Irrigation and drainage management</li> <li>- Mulches, composting, manure use and management</li> <li>- Botanical pest and disease control</li> </ul>	

	<ul style="list-style-type: none"> <li>- Proper agro-chemical use</li> <li>- Sterilization of seedling nursery beds</li> <li>- Seed treatment</li> <li>- Afforestation (mango)</li> <li>- Crop husbandry</li> <li>- Tied ridging</li> <li>- Live fencing</li> <li>- Rain harvesting</li> </ul> <p>3.6 Farmers began growing onion as a means of checking nematodes infestation in 2006 and are still using the method. The technique was disseminated to other farmers at farmer field schools and in radio discussions.</p>	
<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>4.1 GhIH collaborated with 26 institutions including five public universities.</p> <p>4.2 GhIH headed the formation of the Horticultural Advisory Council, and with GSAP is leading the formation of the Agricultural Institute of Ghana.</p> <p>4.3 GhIH AGMs were held in each year with themes relating to technical issues, horticulture as a growth driver in the economy, development and capacity, and specific regional issues. The diversity of themes strengthened the organization’s recognition and networks.</p> <p>4.4 Latest research and advancements in horticulture are now published regularly in the GhIH Journal of Horticulture which is distributed to government officials, academics, researchers, producers and others in the public sector.</p> <p>4.5 GhIH is chartered to offer advice and consultancy services to government, private entrepreneurs and other interested practitioners. It also advises on the curriculum for the training of horticulturists in Ghana.</p>	
<p>5. Women are active participants and beneficiaries of agricultural endeavours.</p>	<p>5.1 Spouses and families supported women to participate in ToT workshops outside their communities that extended beyond a day. Organizing ToT workshops in the community, as opposed to transporting farmers to one location, also supported more female participation. Women gained confidence and assumed leadership through ToT roles, and there is an increased acceptability of female farmers in leadership roles to facilitate/instruct FFS sessions.</p> <p>5.2 45% of all FFS participants were women and at least a third of all ToT participants were also women. This high percentage of women engaged in the project was made possible because women and men were equally involved in planning and scheduling the training programs. Flexible days were selected for instance village market days on which women were very busy were largely avoided.</p>	

	<p>5.3 The active recruitment of women at the community level has led to very active women peer trainers at Busa, Babile and Karni sites.</p> <p>5.4 51% of direct beneficiaries surveyed are female and belong to a farm organization. Female respondents identified increased interaction/collaboration with other farmers and stakeholders as a significant benefit gained through participation in the project.</p>	
<b>Expected Impact</b>	<b>Impact</b>	
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<p>People in rural project communities in the Upper West Region of Ghana are benefitting from improved <b>economic</b> conditions: Items acquired include health insurance, education through schools fees, purchasing of household items and building of improved houses. Increased variety and affordable availability of vegetables locally, and increased consumption. More local employment is available through vegetable production.</p> <p>People in rural project communities in the Upper West Region of Ghana are benefitting from improved <b>environmental</b> conditions: Decrease in pesticide use, improved soil conditions, broader acceptance of BMPs, and introduction of live fencing as an alternative to mud fences.</p> <p>People in rural project communities in the Upper West Region of Ghana are benefitting from improved <b>social</b> conditions: Increased employment and reduced migration, younger people are farming, development of local leadership through the formation of associations, improved status of women through increased income by their participation in vegetable production.</p>	

### **iii Integrated Crop and Livestock Production in Northern Ghana**

Through this project, the Ghanaian Society of Animal Production (GSAP) became more effective and experienced at implementing activities to build strong community-based organizations. In partnership with government and other non-governmental agencies, the project mobilized and empowered women's groups to access information on environmentally sustainable and economically viable technologies to enhance the shea nut-livestock production system. The project worked with 25 communities in the West Mamprusi, Sawla-Tuna-Kalba, and Bole Districts in the Northern Region and in Lawra and Jirapa-Lambussi Districts of the Upper West Region with objectives that included:

- Strengthening and utilizing the institutional capacity of GSAP to improve household food security and income among women in the Northern Region of Ghana.
- Mobilizing and empowering sustainable women's groups to access information on environmentally sustainable and economically viable technologies to enhance the shea nut-livestock production system.

#### **Result Highlights:**

- Through establishing a revolving loan fund, members of beneficiary women's groups obtained protective clothing (Wellington boots and hand gloves), which is credited with reducing snake bites while collecting shea nuts by 77%, contributing to more shea nuts picked per year (29% increase) and increased earnings from shea nuts and processed products.
- The integrated system (livestock/shea nut) ensures that livestock serves as buffer mechanism to the food security needs when the yield of the shea nut crop is poor. 98% of project beneficiary families experienced increased food security and improved nutrition through diversification aspects of the project.
- Reinforcing the under-growth of the shea trees with forage legumes and intensive fodder production reduced the preferential grazing of specific indigenous forage species which are at risk of extinction and thereby enhanced biodiversity.
- The project put in place a program of activities aimed at increasing the participation of women in the animal agriculture profession, including a strategic plan for mentoring.
- Through collaborations with other West African animal science bodies, GSAP worked to establish the West African Society of Animal Production which will be a strong guidance to governments in developing policies in the sub-region.

**END OF PROGRAM REPORT BY PROJECT**

**April 1, 2006 – May 15, 2011**

<b>PROJECT:</b>	<b>Integrated Crop &amp; Livestock Production in Northern Ghana</b>	<b>COUNTRY:</b>	<b>Ghana</b>	<b>PARTNERS:</b>	<b>The Ghana Society of Animal Production (GSAP), Canadian Society of Animal Science (CSAS) &amp; AIC</b>
Expected Outputs		Cumulative Outputs			Variance
1. Improved nutrition and health of rural households		<p>1.1 74% of project beneficiary received training on the prevention of HIV-AIDS, malaria and other communicable diseases.</p> <p>1.2 Through increased awareness in the prevention of communicable diseases and a revolving fund used to obtain insecticide treated bed nets, hospital attendance was reduced by 62% for beneficiary community households</p> <p>1.3 71% of project beneficiary households under the microcredit scheme experienced improved nutrition as they were able to procure food through their own resources when reserves expired.</p> <p>1.4 Through the revolving loan fund, members of women’s groups continued to obtain protective clothing (Wellington boots and hand gloves). Protective clothing is credited with reducing snake bites in the communities by 77%.</p> <p>1.5 Through collaboration with GhIH and training facilitated by MoFA, 269 women received training in vegetable production resulting in increased availability of both vegetables and meat in the participating communities.</p>			
2. Expanded opportunities for women to participate in income generation activities.		<p>2.1 The nine original project communities were maintained and 12 additional communities within the three project districts in the Northern Region came on board. Four communities in two other districts in the Upper West Region were included in the project as an outcome of GSAP’s strategic local partnerships. In total, 25 communities with 743 women’s group members were active in the project.</p> <p>2.2 Partnership between women and local NGOs (Northern Development Society NORDESCO, Rural Women Emancipation Foundation, RWEF, and JACKSALLY) were facilitated by the project, and strengthened through training and material assistance</p> <p>2.3 All the women’s groups in West Mamprusi and Lawra Districts were trained in group dynamics, micro credit and agri-business management, increasing their capacity to generate income.</p>			No significant difference between planned and actual outputs with respect to crop-livestock system occurred. However, the introduction of the micro-credit scheme widened the scope of beneficiaries. The involvement of local NGOs led to horizontal results and higher loan recovery.



	<p>2.4 The project leveraged support from other organizations which saw: 98% of women provided with loans through a micro-credit scheme funded by a Canadian NGO (Bridges of Hope) for rearing livestock, trading in farm produce and processing shea nuts for export. 86% of project beneficiaries increased income through activities funded with micro-credit; and a grant of 2,500 pounds sterling received from Ørskov Foundation procured 52 goats for small ruminant production.</p>	
<p>3. Reduced bush burning, increased productivity of shea trees and food crops, and increased availability of fodder for livestock.</p>	<p>3.1 Bush burning prevention awareness was created in all project communities. Since the beginning of the project, communities recorded about a 60% reduction in incidence of bush fires.</p> <p>3.2 Training in livestock management, rangeland improvement and intensive fodder production was provided to all groups in West Mamprusi and Sawla-Tuna-Kalba as well as Mandarin in the Bole districts.</p> <p>3.3 A steady increase of women planted forage legumes in their backyards and farms (approx 150 in later stages of the project). Seeds collected by women from their fodder plots were used to boost forage for supplementary livestock feeding.</p> <p>3.4 Livestock were healthier, more productive and mortality reduced by about 10% partially due to increased fodder availability and quality from backyard gardens and fire-free rangelands.</p>	<p>The over-sowing of fodder seeds produced mixed results. There are small pockets where the forages established well and persisted over several growing seasons. In other areas, seeds were planted too late in the season and/or too deep, newly-established stands were grazed too heavily, and bush fires destroyed established stands.</p>
<p>4. Increased opportunities for GSAP and its members to influence government policies in the livestock and related industries.</p>	<p>4.1 Actions taken in response to GSAP’s Organizational Assessment recommendations included:</p> <ul style="list-style-type: none"> <li>- improved information flow through regular publication of newsletters and distribution to membership by e-mail</li> <li>- increased membership of women through the formation of student chapters, mentoring of female students and awards to female students</li> <li>- improved financial sustainability through increased membership dues and fees for Journal.</li> </ul> <p>4.2 Eight GSAP members, including 2 women, headed government institutions: Animal Research Institute; Faculties of Agriculture, University of Winnega, UDS, University of Science and Technology, Kumasi; and Millennium Challenge Account, Agriculture Sector. Two members served on the national Poultry Development Board and four as heads of Animal Science Departments of the state owned universities.</p> <p>4.3 Two position papers on beef and dairy production and feedlot systems were developed during workshops organized by GSAP and presented to government. Some new government policies in animal agriculture such as interventions in dairy farming ((training in artificial insemination) and the poultry industry (subsidy on fertilizer for maize and</p>	<p>Position papers on beef and dairy production and feedlot system based on seminars provided by CSAS members have influenced government policy in animal production</p>

	<p>soya production) were based on recommendations from GSAP.</p> <p>4.4 GSAP members continued to publish in international and national journals. Seven issues of the Ghanaian Journal of Animal Science were produced.</p> <p>4.5 The reputation of GSAP in Ghana was enhanced as a result of numerous media reports on GSAP and the project activities in electronic media (18 times) and print media (22 times).</p> <p>4.6 Nineteen quarterly GSAP newsletters (200 copies initially, increased to 300) were produced and distributed to GSAP members and libraries of universities, research institutes and other institutions.</p> <p>4.7 Three GSAP members participated in an enhanced south-south exchange visit with GhIH and TSAEE to Tanzania and hosted a similar visit to Ghana. All organizations were able to put into practice community approaches learned through these exchanges.</p> <p>4.8 Collaboration with GhIH widened the range of beneficiaries for both organizations. Joint activities included:</p> <ul style="list-style-type: none"><li>- Training on RBM and gender equality;</li><li>- Training on scientific and extension paper presentations</li><li>- Features in newspapers</li><li>- Publication of conference communiqués</li><li>- Presentation of AGM communiqués to the Government</li><li>- Training of farmers on nutrition and communicable diseases</li><li>- Introduction of livestock to vegetable communities and vice-versa</li><li>- Farmer exposure visits.</li></ul> <p>4.9 Participation in the GhIH-led initiative on formation of the Agricultural Institute of Ghana with a GSAP member as the chair will see stronger collaboration amongst organizations and greater capacity to contribute to and influence government policy.</p> <p>4.10 Attendance of GSAP representatives at the Animal Science Association of Nigeria's conferences and vice versa has improved the linkages between animal scientists from the two countries. Members publish in each other's journal and conference proceedings and discuss common issues pertaining to the improvement of animal agriculture in both countries.</p> <p>4.11 Discussions were initiated with Nigeria, Burkina Faso, Cameroon, Benin, Senegal and The Gambia on the formation of a West African Society of Animal Production leading towards broader knowledge and a stronger and more cohesive sector.</p>	
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<p>5. Innovative animal husbandry practices and shea butter processing adopted by women.</p>	<p>5.1 61% of women beneficiaries used improved technologies in livestock production, such as the use of appropriate housing and feeding.</p> <p>5.2 20% of women adopted improved technologies in vegetable production, such as the use of manure to improve soil structure and fertility.</p> <p>5.3 Adoption of improved housing of livestock by women enhanced collection and use of manure for vegetable farming.</p> <p>5.4 35% of project beneficiaries used shea-nut processing machines acquired through project participation to facilitate production. Several other groups are saving money towards procuring their own machines.</p> <p>5.5 The quantity of shea-nut picked per year increased by 29%. NGOs helped in marketing the additional produce.</p> <p>5.6 At the close of the project, shea butter processing and marketing activities were turned over to partner NGO's with expertise in this area. CSAS-GSAP communicated to these partners the expectation that they will help the women draw up viable business plans that will allocate funds for salaries, operations, and repair and replacement of equipment and infrastructure.</p> <p>5.7 6,800 Newcastle and 4,350 Pneumonia Diarrhea Complex disease vaccinations aimed at reducing mortalities were undertaken on poultry and small ruminants, respectively.</p> <p>5.6 In 2010, for the first time a woman was judged to be the best small ruminant farmer in the Sawla-Tuna-Kalba administrative district by the District Assembly in conjunction with MoFA providing encouragement for more women to increase their livestock rearing knowledge and skills.</p>	
<b>Expected Outcomes</b>	<b>Cumulative Outcomes</b>	<b>Variance</b>
<p>1. Increased food security and food access for poor communities and particularly for those impacted by HIV/AIDS</p>	<p>1.1 The integrated system being practiced (livestock/shea nut) ensures that livestock serves as buffer mechanism to the food security needs when the yield of the shea nut crop is poor. 98% families of project beneficiaries experienced increased food security and improved nutrition through diversification aspects of the project.</p> <p>1.2 More food is available in the communities at affordable prices despite global increase in food prices.</p>	

<p>2. Rural household income increased.</p>	<p>2.1 Increased sheanut pick normally brings about market gluts and forces down prices offered to women. This has not been the case as the processing equipment provided to the women’s groups enabled the women to process more nuts into butter to add value for better prices.</p> <p>2.2 Household income improved as a result of profit made from farming, trading and processing of shea nuts for export using loans from the project’s micro-credit scheme. Revolving loans and a high sense of commitment by partner NGOs in management will continue to sustain the micro-credit system.</p> <p>2.3 Activities undertaken to enhance livestock and poultry health such as vaccination of small ruminants and poultry against common communicable disease, reduces mortality and increases productivity to enhance income of the women.</p> <p>2.4 84% of women beneficiaries were able to meet household needs as a result of profit made from farming, trading and sale of shea nuts and butter.</p>	
<p>3. Successful environmentally sustainable agricultural practices are implemented.</p>	<p>3.1 The good response of the sheep, goats and chickens to the inclusion of sheanut cake in diets ensured longer housing of animals leading to higher collection of manure for crop fertilization.</p> <p>3.2 Over 60% of women used environmentally sustainable practices, such as the use of livestock manure for vegetable farming, appropriate housing and feeding of livestock.</p> <p>3.3 60% of project communities experienced lower incidence of bush fires.</p> <p>3.4 Reinforcing the under-growth of the shea trees with forage legumes and intensive fodder production reduced the preferential grazing of specific indigenous forage species which are at risk of extinction and thereby enhanced biodiversity.</p> <p>3.5 All members of the women’s groups have adopted improved livestock production practices and their livestock are more productive.</p>	
<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>4.1 GSAP members published in various internationally recognized journals and in 7 issues of GSAP Journal, the Ghanaian Journal of Animal Science. The appointment of a senior scientist with a proven track record in scientific writing as the Editor-in-Chief of GJAS ensured timely and sustainable publication of the journal.</p> <p>4.2 Through collaborations with other West African animal science bodies, GSAP is working to establish the West African Society of Animal Production which will be a strong guidance to government in developing policies in the sub-region.</p> <p>4.3 GSAP members hold respected senior positions on National Boards, Research Institutes,</p>	<p>Involving GSAP members from other institutions to complement those from the Animal Research Institute enhanced technology transfer and monitoring of field activities.</p>

	<p>academic institutions, and in government programs.</p> <p>4.4 Collaboration with GhIH widened the range of beneficiaries for both organizations. Livestock production was introduced to GhIH vegetable farmers and vegetable production to GSAP groups. GSAP members and tertiary agricultural students have benefited from joint GSAP-GhIH organized workshops on gender equality, RBM, scientific writing and extension delivery. The organizations have issued several joint publications.</p> <p>4.5 In collaboration with GhIH, GSAP is working to develop the Agricultural Institute of Ghana for a strong and united voice on agricultural issues affecting the country.</p>	
<p>5. Women are active participants and beneficiaries of agricultural endeavors.</p>	<p>5.1 Female to male percentage membership of GSAP increased from 10:90 to 27:73. More women are serving on various GSAP committees and national agricultural committees (from 4 to 8). GSAP has introduced procedures to support women seeking executive positions within the organization and to promote their participation at AGMs.</p> <p>5.2 To address the low female participation in the animal agriculture profession, the project put in place a program of activities aimed at increasing the participation of females in the profession. A five member committee was charged to develop a strategic plan for mentoring. As part of this mentoring program, the project provided ten final year undergraduate students from five public universities with financial support of Gh¢100 each for preparation of their dissertations. Poster presentations at the GSAP conference by eight tertiary female students encouraged increased female and undergraduate scientific presentations. Formation of GSAP's tertiary Student Chapters in three public universities with women in leadership positions encouraged interest in animal agriculture among female students.</p> <p>5.3 A dissertation entitled "The impact of GSAP-CSAS project on women beneficiaries and its contribution to household food security in Northern Ghana" by Lantana Munkaila, a GSAP member and an Assistant Research Scientist, ARI, was accepted for the award of an MA degree in Agricultural Extension by the University of Ghana. The study indicated that, "There has been a positive impact on the number of animals reared in the study areas as a result of the project interventions...the GSAP-CSAS project has played a significant role in the development of the women beneficiaries and their households. Because these women meet pressing needs of their households, they are usually respected by their husbands. They are consulted by their husbands before certain household decisions are arrived at. The men in the study area testified to the fact that the women contributed significantly to both the nuclear and extended families as a result of the intervention."</p> <p>5.4 Linkages with gender specialists and organizations dealing with women's issues such as Women in Agricultural Development of MoFA and the Ministry of Women and Children's</p>	

	<p>Affairs were strengthened.</p> <p>5.5 Procurement of goats by 85 women through project leveraged funds improved their livestock base and income generated by sales. Income from sale of shea nuts increased by 29%, shea nut butter by 12%, livestock and vegetables earnings increased by 50% and 40% respectively, and trading using micro-credit by 86%.</p> <p>5.6 Education of children, in particular girl children, improved by 87% as women beneficiaries were able to pay school fees.</p> <p>5.7 Influence of women involved in community development and decision making (in particular those stemming from the micro-credit system) improved through their role in the provision of anti-snake serum to community clinics, and through their ability to provide financial assistance to non-group members for farming activities such as the hiring of tractor services.</p>	
<b>Expected Impact</b>	<b>Actual Impact</b>	
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<p>Rural residents in GSAP project communities in the Northern and Upper West Regions of Ghana are benefitting from improved <b>economic</b> conditions: Increased income through sales of shea nut products, livestock and vegetables, and increased trading has allowed for purchase of protective clothing, insecticide treated bed nets, improved family nutrition, payment of school fees, increased capacity to meet household needs, and farming support to non-group members.</p> <p>Rural residents in GSAP project communities in the Northern and Upper West Regions of Ghana are benefitting from improved <b>environmental</b> conditions: Reduced bush burning and decreased volume of CO<sub>2</sub> emissions from the burning of biomass, improved soil structure and fertility, and protection of at risk indigenous forage species resulting in enhanced biodiversity.</p> <p>Rural residents in GSAP project communities in the Northern and Upper West Regions of Ghana are benefitting from improved <b>social</b> conditions: Enhanced influence of women in community development and decision-making and in household decision-making, improved nutrition and family health, improved education of children, and increased presence and influence of women in animal sciences profession.</p>	

#### **iv. Transfer of Soil Science Technologies for Enhancing Food Security, Rural Development and Environmental Quality in Ethiopia**

In April 2008, the ITPP embarked on a new partnership project with the Ethiopian Society of Soil Science (ESSS) and the Canadian Society of Soil Science (CSSS). The project, called ETCANSOL, supported the capacity building endeavours of ESSS to play a role in facilitating the compilation and transfer of soil management technologies and contribute to the country's efforts towards food security and accelerated agricultural development.

##### **\*Result Highlights:**

- Based on recommendations from an Organizational Assessment, ESSS has:
  - Developed a Strategic Management Plan with 2011-2020 implementation framework;
  - Engaged in ongoing development of tools for communications with membership, including an ESSS website;
  - Initiated recruitment of young members into the Executive Committee to broaden representation of membership and foster continuity through knowledge transfer and mentoring;
  - Encouraged young professionals, especially women, to become members.
- Five regional ESSS nodes have been established (Hawassa, Jiomma, Mekelle, Baher Dar and Haramaya) providing the organization with a broader membership base as well as closer connections for work with farming communities
- ESSS organized and hosted three national workshops:
  - 2009: “Improved Natural Resource Management for Food Security, Poverty Reduction and Sustainable Development”. The goal of this workshop was to catalogue soil, water, climate and agroforestry research findings and to establish a base from which to develop and disseminate appropriate information to farmers, extension officers and policy makers.
  - 2010: Extension focused workshop to identify the extension needs for soil and resource information, and packaging and delivery for farm level use. The workshop examined the potentially competing demands of food security and natural resources degradation, and the importance of establishing entry points within the extension system.
  - 2011: “Natural Resource Management for Climate Change Adaptation”. The workshop contributed to establishing a consolidated information base to assist in mitigating effects of climate change and to develop a road map for adapting to climate change and sustainable economic development.

\* Due to the shorter term (3 years) of the project and competing demands on ESSS members during the Civil Service reform process, results were limited primarily to the Output level.

**END OF PROGRAM REPORT BY PROJECT**

**April 1, 2008 – May 15, 2011**

PROJECT:	<b>ETCANSOL</b>	COUNTRY:	<b>Ethiopia</b>	PARTNERS:	<b>Ethiopian Society of Soil Science, Canadian Society of Soil Science &amp; AIC</b>
Expected Outputs	Cumulative Outputs				Variance
<p>1. Improved capacity of ESSS to carry out its mandate to members and stakeholders.</p>	<p>1.1 An Organizational Assessment (OA) of ESSS was conducted in 2008-09 with 64 ESSS members surveyed representing affiliations with six different organizations and stakeholder groups (research, academic institutions, government and NGOs). The OA identified priority issues and key members’ needs, as well as methods to foster organizational sustainability including support to women and youth participation in the organization.</p> <p>1.2 Based on the OA recommendations, ESSS has:</p> <ul style="list-style-type: none"> <li>- Developed a Strategic Management Plan with 2011-2020 implementation framework;</li> <li>- Engaged in ongoing development of tools for communications with membership, including an ESSS website;</li> <li>- Established an internal advisory panel drawn from senior and honorary ESSS members to provide oversight of the society;</li> <li>- Initiated recruitment of young members into the Executive Committee to broaden representation of membership and foster continuity through knowledge transfer and mentoring;</li> <li>- Encouraged young professionals, especially women, to become members (plans to enroll student members at regional nodes will increase the proportion of women members as there is a greater representation of women in natural resources management academics than in other areas).</li> </ul> <p>1.3 Five regional ESSS nodes were established (Hawassa, Jiomma, Mekelle, Baher Dar and Haramaya) providing the organization with a broader membership base as well as closer connections to work with farming communities. Two nodes (Hawassa and Baher Dar) established outreach programs to young professionals in their regions. The nodes actively contributed to preparations for the spring 2011 workshop. The remaining three nodes are anticipated to commence activity later in 2011.</p> <p>1.4 An ESSS member (Gender Equality Mainstreaming Coordinator for the Ethiopian Institute of Agricultural Research) has joined the AIC GEM as an active and engaged member.</p> <p>1.5 Publication of the peer-reviewed biannual Ethiopian Journal of Natural Resources resumed through establishing a new editorial board. To promote distribution of the</p>				<p>Initially, involvement of ESSS members in their OA and in other aspects of getting the project underway was limited due to the effects of the civil service reform process or Business Process Reengineering (BPR) which was happening in the National Agricultural Research System throughout the country which affected most ESSS members.</p>



	<p>Journal all issues are now indexed in AGRIS which makes the abstracts globally accessible.</p> <p>1.6 ESSS members increased their capability and confidence in the use of analytical software particularly in the area of considering climate as a natural resource and its practical linkage with soil management. This was particularly evident in the quality and number of papers addressing issues of climate, watershed and agroforestry presented at the 2011 workshop.</p> <p>1.7 Regular professional exchange visits of Canadian partners encouraged cooperation on project design and evaluating progress.</p> <p>1.8 ETCANSOL representatives benefited through exchanges with more mature and community connected soil/land management projects in Sri Lanka (IPM 2009) and Vietnam (2010), gaining insights on practical technology transfer mechanisms and on collaboration amongst stakeholders.</p>	
<p>2. Improved access to research output on soil and water management by extension people, policy makers, development workers, and farmers.</p>	<p>2.1 ESSS organized and hosted three national workshops:</p> <ul style="list-style-type: none"> <li>- 2009: “Improved Natural Resource Management for Food Security, Poverty Reduction and Sustainable Development”. The goal of this workshop was to catalogue soil, water, climate and agroforestry research findings and to establish a base from which to develop and disseminate appropriate information to farmers, extension officers and policy makers. 41 papers were presented during the workshop (38M, 3F). Participants were largely young professionals coming from regional and federal research institutes, universities and NGOs. Proceedings were published and all copies were immediately sold out. (100 participants, 10F)</li> <li>- 2010: Extension focused workshop to identify the extension needs for soil and resource information, and packaging and delivery for farm level use. The workshop was attended by government officials, extension agents, ESSS members, members from other agencies and private sector. The workshop examined the potentially competing demands of food security and natural resources degradation, and the importance of establishing entry points within the extension system while gaining recognition and contributing roles to formal government initiatives such as the Agricultural Growth Program and the Growth and Transformation Plan. Information gathered will contribute to the development of fact sheets, extension manuals and bulletins. Longer-term priorities, including linkages to national agricultural development programs, also were set. (80 participants, 5F)</li> <li>- 2011: “Natural Resource Management for Climate Change Adaptation”. 41 and 13 abstracts accepted for oral and poster presentations respectively; two keynote speeches and five lead papers presented. The workshop contributed to establishing a consolidated information base to assist in mitigating effects of climate change and</li> </ul>	

	<p>to develop a road map for adapting to climate change and sustainable economic development. Presentations included those by social scientists to demonstrate the social dimensions of sustainable land management and increased productivity. (100 participants, 10F).</p> <p>2.2 In conjunction with government support to strengthen the capacity of soil testing laboratories in Ethiopia and to improve networking to use standardized procedures, project coordinators from CSSS and ESSS visited soil testing labs in Wokite, Bedele, Nekemt and Fitcha to assess status and identify requirements for improvement.</p>	
<b>Expected Outcomes</b>	<b>Cumulative Outcomes</b>	<b>Variance</b>
1. Increased food security and food access for poor communities and particularly for those impacted by HIV/AIDS.	<p>1.1 Awareness by ESSS members on the cause and effect relationship or circular interaction amongst food security, natural resources degradation and climate change adaptation and mitigation has been raised with a dedication to work to establish a balance between competing demands at policy and implementation levels.</p> <p>1.2 This inception phase has established baseline knowledge and data for soils and resources, identified needs by and for extension personnel, and the means to facilitate technology transfer to farming communities.</p>	
2. Rural household income increased.	<p>2.1 During this inception phase, there was no direct implementation of BMPs at the rural household level and thus no change directly attributable to the project. However, the organization has increased its knowledge on several initiatives from which it can extract data and analyze from its perspective and then verify with target communities.</p>	
3. Successful environmentally sustainable agricultural practices are implemented.	<p>3.1 The output documents from the workshops form the basis for developing new agronomic recommendations, strategies for climate change mitigation, as well as providing the potential for connecting with emerging opportunities, e.g. Ethiopia's Growth and Transformation Plan and the Climate Resilient Green Economy initiative.</p> <p>3.2 Particular challenges identified were those of the role of ETCANSOL in contributing to positive resolutions to fertilizer management, and the introduction of conservation agriculture, such as minimum/zero tillage and crop residue management including opportunities and methods for composting.</p>	

<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>The establishment of five nodes (ESSS branches) greatly enhanced the society’s organizational linkages as well as membership expansion. The nodes are facilitating communication to members in distantly located areas where many new research and learning institutes are emerging.</p> <p>The project initiated a strategy to implement activities through formal institutional linkages – Ministry of Agricultural and Rural Development, NGOs, Farmers Unions and Cooperatives and the National Research System.</p> <p>Through participation in ESSS workshops, policy makers have shown interest in natural resources conservation and enhancement.</p> <p>Linkage between ESSS and the Sustainable Land Management (SLM) Platform helped ESSS to collaborate with key stakeholders in piloting natural resource management technologies at selected communities or watershed levels. (SLM is hosted by the Ministry of Agriculture aimed at a watershed based intervention for scaling up existing natural resource management technologies, as well as carbon accounting for climate mitigation.)</p> <p>In its Strategic Plan 2011-2020, ESSS committed to strengthening its capacity to take a leading role in assisting the government in establishing a sustainable land use policy.</p>	
<p>5. Women are active participants and beneficiaries of agricultural endeavours.</p>	<p>ESSS identified a member to participate on the AIC Gender Equality Mainstreaming (GEM) working group.</p> <p>ESSS encouraged women’s involvement in the conferences both as participants and as presenters.</p> <p>Through interaction with other ITPP projects, ESSS became more aware of gender equality and engaging women at both organizational and community levels.</p>	
<p><b>Expected Impact</b></p>	<p><b>Actual Impact</b></p>	
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<p>ETCANSOL has been operational for three years with activities focused mainly on assembling the scattered information related to NRM research and extension in the four large regions: Oromia, Amahara, Southern region and Tigray, while re-building and strengthening the capacity of ESSS to be a leader in NRM.</p>	

## **v. Youth and Women Agricultural Training in North-western Tanzania**

This continuing project to reduce poverty and improve food security in participating communities maintained mobilization of women and youth groups in the Misungwi District of the Lake Zone in North-western Tanzania, expanded into two new Districts – Magu and Ukerewe within the Lake Zone, and organized in two new Zones – Western and Central. The project objectives focused on:

- Mobilizing and sensitizing youth and women to organize themselves into groups.
- Exposing youth and women to successful village based projects accomplished by their peers.
- Providing training on business development, record keeping and financial management, marketing, guidance on specific production practices, and value-added food processing so that youth and women may increase their skills to maintain viable rural agro-businesses and contribute to household and community food security.
- Strengthening TSAEE as an organization by recruiting new members, locating and revitalizing past members and providing opportunities for members to gain skills through participation in community programs.

### **Result Highlights**

- As an outcome of combined practices in improved agricultural production, value addition and marketing, individual participants in groups increased their household income from an average of 25,000 Tsh/month (\$17.85) in 2006 to 75,000 Tsh/month (\$53.57 Cdn) in 2011.
- Increased income has been invested by groups and their individual participants to attain tangible goals. This can be directly attributed to TSAEE skill building amongst participants that encouraged financial planning, budgeting and savings. In addition to completion or near completion of 69 homes; fees, uniforms and supply costs for 184 primary school children and 115 secondary school students; purchases by groups and individuals included investments in farm equipment, communication technologies and domestic items have been documented..
- The value of tangible goals purchased based strictly on income increases can be stated as equaling 296,916,384 Tsh (\$212,083 Cdn). Over the full term of the project, the full dollar value of CIDA support budgeted and spent, from rural beneficiary engagement to organizational capacity building, was \$208,000 from 2006-11. This equates to a return after 5 years of 102% or \$1.02 Cdn for every \$1 Cdn invested by CIDA realized through agro-based income generating practices amongst women and youth.

**END OF PROGRAM REPORT BY PROJECT**

**April 1, 2006 – May 15, 2011**

<b>PROJECT:</b>	<b>Youth and Women Agriculture Training</b>	<b>COUNTRY:</b>	<b>Tanzania</b>	<b>PARTNERS:</b>	<b>Tanzania Society of Agricultural Education and Extension (TSAEE), the TSAEE Project Canadian Coordinating Committee &amp; AIC</b>
Expected Outputs		Cumulative Outputs			Variance
1. Formation of groups to increase the sharing of information, marketing opportunities, labour and support.		<p>1.1 At the close of the project, 35 (22 women’s groups and 13 youth groups) are active accounting for 287 participants (193F, 94M) in Misungwi District (54F, 9M), Magu District (77F, 57M) and Ukerewe District (62F, 28M). (TSAEE also provides guidance to 18 <i>graduated</i> women’s groups in the formation of the “Muwawiwa Women’s Network”)</p> <p>1.2 Consistent processes employed by all groups in their organization, facilitated by assigned TSAEE project officers, fostered the use of democratic processes amongst all groups in the selection of their executive, decisions of their collective agricultural activities, use/investment of funds generated, and in identifying group and individual goals.</p> <p>1.3 All groups met at least once monthly to discuss progress, report on financial status and approve group expenditures, address financial and agronomic challenges, and develop future group plans.</p> <p>1.4 All groups received training in:                      Leadership                      Entrepreneurship                      Record Keeping                      Financial Management</p>			<p>Group formation in Ukerewe and Magu took longer than originally anticipated due to limited experience in group formation and cultural differences in the communities. Coordinator visited frequently to support this work. The slower approach has been beneficial in gaining understanding and buy-in from community members.</p> <p>Ukerewe has experienced movement of group members (marriage, jobs, family movement, especially for fishermen) which has interrupted their participation in the project.</p>
2. Group members develop plans to improve household food security and increase food access through ongoing sharing of information.		<p>2.1 All groups developed plans in agro-based enterprises focused on improved crop, horticulture and livestock production.</p> <p>2.2 Through improved agricultural production training from TSAEE with emphasis on proper spacing, manure/organic fertilization, and proper crop and variety selection, average yield increases were: Paddy (37-81%); Tomato (40-75%); Maize (40-100%) and Cassava (18-63%).</p> <p>2.3 Increased yield was shared by the group either by: a) harvest divided equally amongst group members with one extra share for the group, stored as an emergency supply for the hungry months, with any remainder sold to finance group activities, or b) Harvest kept in storage until after the hungry months, or at a</p>			

	<p>recognized peak market identified by members, the groups sells the entirety of the harvest with profits divided equally amongst members and a single share returning to the group activities.</p> <p>2.4 TSAEE piloted training with the 6 Misungwi groups in Family Food Budgeting to ensure that men and women equally contributed to the balanced use of harvests to provide for both household consumption and income needs.</p> <p>2.5 At the conclusion of the project, 95% of surveyed participants described themselves as having enough food for 12 months of the year as compared to only 15% of surveyed participants having enough food for their families for 8 months of the year at the outset.</p>	
<p>3. Women and youth in targeted rural areas have increased awareness of potential opportunities for income generation through agricultural production and expanded opportunities to participate in and benefit from income generation through agricultural production and value added services.</p>	<p>3.1 Thirty of 35 groups engaged in value added practices in basic milling (Paddy milling +86% in average market price; cassava grinding +71%; maize grinding +46%). Further value-added and income generation included production of improved stoves and biofuel briquettes, baking, sewing, crafts, brick making and wine production.</p> <p>3.2 Participants valued and used skills acquired in record keeping, financial management and market function (peak market timing). By the end of the project, all surveyed groups were able to provide a financial summary of their activities.</p> <p>3.3 Participants expanded their operations to include new agricultural activities. All groups added an average of one agricultural stream of income to their practice annually during the period of 2008-10.</p> <p>3.4 As a result of combined practices in improved agricultural production, value addition and marketing, individuals in groups have increased their household income from an average of 25,000 Tsh/month (\$17.85 Cdn) in 2006 to 75,000 Tsh/month (\$53.57Cdn) in 2011.</p> <p>3.5 Income increases have been invested to attain tangible goals. This can be directly attributed to TSAEE skill building that encourages financial planning, budgeting and savings. In addition to completion or near completion of 69 homes; income was used for school fees, uniforms and supply costs for 184 primary school children and 115 secondary school students; and purchases by groups and individuals including investments in farm equipment, communication technologies and domestic items.</p> <p>3.6 The value of tangible goals purchased as based strictly on income increases can be stated as equaling 296,916,384 Tsh (\$212,083 Cdn). Over the full term of the project, the full dollar value of CIDA support budgeted and spent, from rural beneficiary engagement to organizational capacity building, was \$208,000 from</p>	

	<p>2006-11. This equates to a return after 5 years of 102% or \$1.02 Cdn for every \$1 Cdn invested by CIDA that is generated through agro-based income generating practices amongst women and youth.</p> <p>3.7 All surveyed participants reported that they now employ the same agricultural and economic practices they learned in group training amongst their households and share the benefits of their increased incomes to improve the lives of their families. It can be estimated that the 287 participants share the benefits of their efforts with an additional 1,950 men, women and children.</p> <p>3.8 All stated that they intend to continue their rural enterprise practices indefinitely.</p>	
<p>4. Increased availability of technical training and information</p>	<p>4.1 All groups received training in:  Crop and Livestock husbandry  Poultry  Crop Production  Soil Conservation/Land Preparation  Post-harvest Technology  Environmental Conservation  Improved Stoves and Agro-forestry  HIV/AIDS Control</p> <p>4.2 Information on specific crop, horticulture and livestock practice was made available in hardcopy formats in appropriate language and literacy levels. Where language and literacy levels were not sufficient to disseminate information through text, TSAEE used oral communication. This practice improved language functionality in Kiswahili amongst groups. During the full term of the project, more than 50 training manuals were developed by TSAEE in Magu, Ukerewe, and Misungwi.</p> <p>4.3 Before working with TSAEE, all groups described their access to information from government extension personnel as limited to two visits annually that generally occurred in times of agronomic crisis. The average number of extension visitations from TSAEE increased to a minimum of:</p> <ul style="list-style-type: none"> <li>- Weekly in Magu</li> <li>- Bi-weekly in Ukerewe</li> <li>- Bi-monthly in Misungwi</li> </ul> <p>Assigned TSAEE POs working with a maximum of 2-3 groups that are visited on a minimum bi-weekly basis demonstrated the strongest results in relation to increases in income and participant satisfaction to information access.</p>	<p>In 2006, the group in Lubuga Village knew only their tribal language of Sukuma. By the conclusion of the project they were functional in the use of Kiswahili in reading, writing and oral communication.</p>

<p>5. Expanded networks and linkages for women and youth groups.</p>	<p>5.1 Youth and women engaged in processes that created further linkages through the TSAEE project with a focus on interaction amongst fellow groups for the sharing of experiences, including participatory annual evaluation sessions. These sessions led to some groups altering or adopting new BMPs and income generating practices.</p> <p>5.2 In 2007, 10 project participants representing 5 groups travelled to Arusha and Moshi to participate in a national agricultural show. In 2008, 10 groups in Magu, Ukerewe and Misungwi participated in a regional agricultural exhibition. Groups displayed their products, gained exposure to new ideas, contacted NGOs and improved awareness of government services. All groups report that they now regularly attend their annual district agricultural shows.</p> <p>5.3 Group organization resulted in wider cooperation with other NGOs to access additional skills training. For example, in Magu, Ukerewe and Misungwi, groups supported by TSAEE have been able to connect with CARE International for project cooperative skills training in micro-credit management.</p> <p>5.4 The high value that groups place on the experience of exposure to new ideas and practices fostered a spirit of mentorship with their neighbours. 73% are involved in mentoring others within an average radius of 5km.</p> <p>5.5 Groups commonly describe that their members improved status as community leaders as a result of project participation. All groups state that they are recognized as an active community body by their village representatives.</p> <p>5.6 Member representatives from 18 women’s groups in Misungwi who participated in past projects with TSAEE have collectively come together to form a Women’s Network Association. As a result of their experience in the increased skills and abilities gained by working cooperatively, these women identified that maintaining a collective allows greater networking opportunities and gives credibility to them as a formalized body. With guidance from TSAEE, the group developed a constitution, set goals and elected leaders.</p>	
<p>6. TSAEE has organizational growth, increased visibility, expanded networks and linkages.</p>	<p>6.1 As a result of capacity building at the branch level throughout the duration of the project, TSAEE Lake Zone:</p> <ul style="list-style-type: none"> <li>- increased active membership from 116 in 2006 to 218 in 2011</li> <li>- increased active branches from 5 to 12</li> <li>- increased active zones of TSAEE from 1 (Lakes Zone) to 3 (Lake, Western and Central Zones).</li> </ul> <p>6.2 TSAEE Lake Zone lead discussions and activities to renew TSAEE as a functioning</p>	



	<p>National Organization. A task team was formulated to review the current National Constitution and set guidelines for the election of a new National Executive during a National General Meeting scheduled for 2012.</p> <p>6.3 TSAEE branches advanced their knowledge, skills and experience gained in project development, delivery and management to their fellow TSAEE members, fellow professionals in ag research and extension, NGOs of similar interest and government bodies through papers and presentations.</p> <p>6.4 TSAEE participated in professional exchanges to ITPP IPMs in Edmonton in 2007 (1F, 2M), Sri Lanka (1F, 1M) in 2009. In 2007 TSAEE participated in south-south exchanges with the ITPP Ghana projects with practical sharing of experiences. An exchange to Canada was undertaken in 2010 to attend the Association of International Agricultural and Extension Education (AIAEE) annual conference in Saskatoon (1F, 1M).</p> <p>6.5 TSAEE participated in six local and regional agricultural planning sessions – increasing their membership and their recognition by regional governments.</p> <p>6.6 In 2009, TSAEE was invited by the Minister of Agriculture to prepare a strategy paper on improving agriculture in the Lake Zone. The report was presented in 2010. At the Lake Zone AGM in 2011, the support of the Ministry of Agriculture was evidenced by the participation of a senior national extension officer and the return of the Assistant Director of Extension. The increased visibility and influence of TSAEE to policy makers and international donors is directly attributed to effective skills building in project management and rural engagement that has been delivered through the duration of the project.</p>	
<p>7. TSAEE has increased capacity to plan, deliver and monitor appropriate and environmentally sustainable agricultural programming.</p>	<p>7.1 TSAEE delivered workshops in skills development annually to members. Canadian partners have supported skills training workshops during professional exchange visits to Tanzania including a GPS workshop resulting in the incorporation of a pilot project on the integration in GIS mapping.</p> <p>7.2 Skills training in contemporary issues resulted in the formation of a Gender and HIV/AIDS desk and an Environment desk which meet once quarterly to discuss issues arising in gender and environment as they potentially impact or benefit the project.</p> <p>7.3 Gender skills training resulted in the recognition of high capacity in TSAEE Lake Zone for effective delivery of gender mainstreaming programs to rural communities amongst professional partnership programs.</p> <p>7.4 The project also supported distance education through Assiniboine Community College for a TSAEE member (F, Lake Zone Treasurer) for credited study in the use of</p>	<p>While TSAEE was able to maintain life improvement gains amongst participating groups, an increasing need for short, medium and long term weather and climate change planning for effective cropping was an unexpected need identified as a future capacity building priority.</p>

	<p>Microsoft Excel. This training resulted in improved use of Excel in financial reporting in the ITPP project.</p> <p>7.5 TSAEE Lake Zone fully integrated the use of ICT with regular email, Skype, word processing and spread sheet in all activities.</p> <p>7.6 All TSAEE POs indicate that the experience gained has improved their effectiveness in the field with rural beneficiaries and their professional status amongst their peers in the agricultural sciences. Members with scientific research backgrounds indicate that they now know how to engage rural farmers to adopt improved agricultural practices (improved extension knowledge) while members in extension reported that they have better access to specialized agricultural information (improved knowledge of ag research innovations). All state that TSAEE membership has enabled them to turn theory into practice</p>	<p>While training in ICT use has been delivered in Magu, Ukerewe and Tabora, the low availability of hardware has been a limiting factor in the application of skills in a tangible manner.</p>
<p>8. TSAEE members (women) have increased opportunities in project activities and leadership.</p>	<p>8.1 Throughout the duration of the project, gender participation in the 7 member Lake Zone Executive changed from 2 female (29%) and 5 male (71%) in 2006 to 3 female (43%) and 4 male (57%) in 2011. Two women occupy positions of assigned responsibility in the executive as Vice Chair and Treasurer.</p> <p>8.2 The membership on the project steering committee (25% F and 75% M) is nearly identical to that of the gender composition of membership in the Lake Zone as a whole (21% F and 79% M). Women occupy 44% of leadership positions at the district level.</p> <p>8.3 The visibility of women in active leadership positions at the district/branch level has been highly effective in positively demonstrating the opportunities and abilities possessed by women in TSAEE on a day to day basis.</p> <p>8.4 Throughout the full term of the project, TSAEE actively worked to mainstream gender priorities amongst its membership by a method of increasing the quantity and quality of female member participation in TSAEE activities. While this method has positively advanced the skills of women engaged in the project, it has also improved the perspective of male TSAEE members to gender dynamics in agriculture and in rural communities.</p>	
<p><b>Expected Outcomes</b></p>	<p><b>Cumulative Outcomes</b></p>	<p><b>Variance</b></p>
<p>1. Increased food security and food access for poor communities and particularly for those impacted by HIV/AIDS.</p>	<p>1.1 Through improved agricultural production training from TSAEE with emphasis on proper spacing, manure/organic fertilization, and proper crop and variety selection, average yield increased amongst groups: Paddy (37-81%); Tomato (40-75%); Maize (40-100%) and Cassava (18-63%).</p>	<p>TSAEE worked in communities that are impacted by HIV/AIDS, but did not require status identification. All participants were treated equally and received equal benefits. PLWHA were assumed to be</p>

	<p>1.2 Surveyed participants indicated that they employ the combined practices of improved production techniques, harvest management, and marketing timing in the individual household farms.</p> <p>1.3 Food planning was further advanced through TSAEE training and promotion of improved food storage practices. Participants reported that they now use bags for main staple crop storage of maize, rice, and cassava as opposed to open air storage in 2006.</p> <p>1.4 Rooms were included in all 69 modern homes constructed by project participants that allow for storage of 1,000 kg of food crops per home (total of 69,000 kg storage). This provides for storage of excess group harvest shares and individual harvest excess to ensure sufficient food access through the November to February period of the hungry months.</p> <p>1.5 The near universal period of January-March food insecurity (1-2 meals/day) experienced in 2006 is described in 2011 as being a food secure period.</p> <p>1.6 Changes in diets reported included:</p> <ul style="list-style-type: none"> <li>- Daily ability to use cooking oil, spices and sugar (at the outset used only on a highly rationed basis).</li> <li>- Increase from bi-weekly protein consumption in 2006 to minimum of weekly protein consumption in 2011.</li> <li>- Universal reports of higher vegetable consumption.</li> </ul> <p>1.7 24% of participants described their general health and nutrition as improved, and 76% described as very improved.</p>	<p>present at a proportion of 5.6% that matches the Tanzanian national HIV/AIDS prevalence rate.</p>
<p>2. Rural household income increased.</p>	<p>2.1 As a result of combined practices in improved agricultural production, value addition, financial management, and marketing, group participants were able to increase their household income from an average of 25,000 Tsh/month (\$17.85 Cdn) in 2006 to 75,000 Tsh/month (\$53.57 Cdn) in 2011. When the average 2011 monthly income of participants is considered as a daily average of 2,000-3,333 Tsh/day (\$1.33-\$2.22 US) it can be stated that 100% of participants in the project have secured incomes high enough to be considered above the international poverty line for least developed countries of \$1.25 US/day.</p> <p>2.2 Income increases were invested by groups and their individual participants to attain tangible goals in property and services amongst all groups that total 445,152 Tsh (\$317,965 Cdn) as of 2011.</p> <p>2.3 Increases in average individual monthly income equate to +66.7%. When this percentage value is applied against the value of tangible goals achieved, the value</p>	

	<p>of tangible goals purchased as based strictly on portions of income increases can be stated as equaling 296,916,384 Tsh (445,152,000 Tsh x 0.667) or \$212,083 Cdn. Over the term of the project, the dollar value of CIDA support budgeted and spent, from rural beneficiary engagement to organizational capacity building was \$208,000. This equates to a return after 5 years of 102% or \$1.02 Cdn for every \$1 Cdn invested by CIDA that is generated through agro-based income generating practices amongst rural women and youth.</p> <p>2.4 All participants reported their monthly income as resilient to withstand unforeseen change (unexpected household needs, illness, etc.). However, all stated that the stability and resilience of their monthly income was dependent upon normal weather conditions.</p>	
<p>3. Successful environmentally sustainable agricultural practices are implemented.</p>	<p>3.1 Skills training delivered by TSAEE in BMPs that support improved production and environmental sustainability and adopted by participants included:</p> <ul style="list-style-type: none"> <li>- Improved poultry and/or fowl residue incorporation</li> <li>- Drip irrigation</li> <li>- Water use planning</li> <li>- Irrigation and drainage maintenance and management</li> <li>- Manure use and management</li> <li>- Composting</li> <li>- Fertilization and fertility management</li> <li>- Botanical pest and disease control</li> <li>- Proper agro chemical use and storage</li> <li>- Reforestation/Afforestation</li> <li>- Improved stoves, biomass efficiency</li> <li>- Crop scheduling and rotations</li> <li>- Improved spacing (maize and paddy)</li> <li>- Intercropping (trees/maize, legumes/maize)</li> <li>- Improved seed and variety selection</li> <li>- Staking and pruning of vegetable crops</li> <li>- Crop establishment</li> <li>- Contour cropping</li> <li>- Tied ridging</li> <li>- Terracing</li> </ul> <p>3.2 All surveyed reported that they employ the practices of their group on their personal farm sites. A total of 509 acres of agricultural land is under production practices with BMPs on both group and individual farms.</p> <p>3.3 Ten of the 35 groups also adapted agro-forestry into their group activities. 2,455</p>	

	<p>trees were planted through TSAEE training in nursery development and seedling establishment.</p> <p>3.4 TSAEE has further integrated agro-forestry practices with improved portable stove training to foster a viable means of jointly increasing biomass supply while simultaneously reducing wood biomass consumption. Women interviewed as improved stove users also reported consistently that they felt their health was improved from the reduced workload of carrying large amounts of firewood long distances.</p> <p>3.5 Practices developed by groups in adapting to extreme variations in weather and climate included:</p> <ul style="list-style-type: none"> <li>- Land selection to higher elevation (flooding)</li> <li>- Delay sales of excess until rain arrival to ensure sufficient household food needs are met (drought)</li> <li>- Residue incorporation to maintain soil moisture and reduce surface erosion, and shifting horticultural planting dates to rainy season rather than dry offseason production (unpredictable rainfall)</li> <li>- Crop selection to short season varieties and maize, and drought resistant crop selection in cassava, sweet potato and sorghum.</li> </ul> <p>3.6 The high value that groups place on BMP practices fostered a spirit of mentorship with their neighbours. Interviewed participants stated that they are approached by neighbours for direction in accomplishing improved yields and this is communicated through descriptions to implement BMPs.</p> <p>3.7 All participants indicated that they will continue to employ the skills they have gained in both their group and individual household agro-economic activities.</p>	
<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>4.1 TSAEE expanded its range of programming to work with multiple development partners, including:</p> <ul style="list-style-type: none"> <li>- Singida District Council (livestock vaccination)</li> <li>- Zonal Ag Rural Development Fund (improved sunflower)</li> <li>- UNDP (Support to Local Economy of Mwanza)</li> <li>- Marquis Project (Sustainable Energy/Climate change)</li> <li>- Oxfam Great Britain (Improved poultry)</li> <li>- Saskatoon Rotary (Youth tree planting)</li> <li>- Research Triangle Institute (Anti-malarial campaign)</li> <li>- SNV Netherlands (Improved red meat)</li> <li>- People-to-people (Women’s network)</li> <li>- RM of Gimli (Youth twinning)</li> </ul>	

	<p>4.2 Continued cooperation with other NGOs in knowledge sharing and project implementation included working relationships with Tanzania Traditional Energy and Environment Organization (TaTEDO) and Tanzania Home Economics Association, and in the Western Zone with Total Land Care Tanzania. These networks and linkages expanded TSAEE’s reach throughout the country.</p> <p>4.3 Expanded opportunities for TSAEE to participate and contribute to local and regional agricultural planning: National and District planning for agricultural sector in Singida (Central Zone); annual regional planning sessions in Tabora (Western Zone); District agricultural development planning on Misungwi, Ukerewe, and Magu (Lake Zone). The cumulative result is that TSAEE is a recognized agency amongst NGOs, local and regional Tanzanian government that can effectively improve lives in rural communities.</p> <p>4.4 In 2009, TSAEE in the Lake Zone and Canadian partners drafted a Vision and Mission statement to ensure long term clarity in the focus of their efforts while undertaking strategic planning processes.</p>	
<p>5. Women are active participants and beneficiaries of agricultural endeavours.</p>	<p>5.1 Women represented 67% of the participants in all groups and 53% of youth group participants. (Ukerewe district has slightly more female participants as most young men are engaged in the fishing industry).</p> <p>5.2 Both men and women have equal access to membership, assume organizational leadership, share opportunities and benefit from the organization. Women hold several key positions in project delivery. Throughout 105 available group leadership positions, women occupy 51 (49%). Both women and men have equal chance for membership in groups, leadership and decision-making and to participate in training, express their views and access equal proportion of the dividend accrued from group activities.</p> <p>5.3 Surveyed group participants stated that they feel women are regarded more positively in their homes and communities as a result of taking part in the project. During an evaluation session in Ukerewe to which a village elder (male) attended, he was very clear to state that many of the changes in the community were a result of the efforts of women within the TSAEE group.</p> <p>5.4 The result of both increased income amongst women participants and increased cooperation amongst men and women in economic decision making has improved household life (reduced economic pressure and conflict) for project participants.</p>	

Expected Impact	Actual Impact
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<p>Results achieved throughout the duration of the project have contributed to improved lives for the women, men and youth in rural communities in North-western Tanzania:</p> <p><b>Food Security:</b> All participants in the project have the ability to attain food security by a combination of increased food production or capacity to purchase for 12 months of the year.</p> <p><b>Education:</b> Increased income by project participants supported primary education for 184 children and secondary school education for 115 youth.</p> <p><b>Shelter:</b> Completion or near completion of 69 homes by project participants each with storage capacity for 1000 kg of food crops.</p> <p><b>Environmental:</b> Participants have put into practice 20 BMPs with significant results (up to 100%) in yield increases.</p> <p><b>Equity:</b> Male and female participants benefited equally (tangible goals acquisitions, increased income, community recognition) through their participation in the project.</p>

## **vi. SRICANSOL II Sustainable Soil and Crop Management**

This project applied information and knowledge from previous stages towards improved livelihoods and nutritional status of the rural farming communities in agriculturally, economically and sociologically important farming systems in Sri Lanka through improved crop productivity, and better soil and land management practices. The project worked with seven major farming/cropping systems in four Districts within the country: Anuradhapura, Polonnaruwa, Kandy, and Gampaha.

The project objectives included:

- Identification of soil fertility constraints and unwise practices leading to soil and water pollution in major farming/cropping systems.
- Education of a wide cross-section of the community – policy makers, academics, extension officers, NGOs and farmers – on how crop production and crop productivity improvements can be both economically profitable and environmentally sustainable.
- Development and dissemination of mitigation options with farmer participation to improve and sustain crop production with minimal damage to soil and environment in selected farming systems.
- Development of a soil management database to be integrated with the SRICANSOL soil database for decision supporting tools on soil fertility and constraints, and soil/water pollution in major farming/cropping systems.
- Specific engagement of women at all levels and in all processes.

### **Result Highlights:**

- SRICANSOL II developed a “systems” approach to implementing project activities: It strategically identified all relevant agencies and brought together soil scientists, water engineers, health professionals, academics and social scientists to address common issues of land use, productivity, socio-economics (poverty and hunger) for many rural poor farmers in some of the major agricultural cropping systems in Sri Lanka. Significant in-kind support was leveraged from other agencies and institutes. The concept, approach and methodology were widely accepted as a model for future endeavours in soils and water conservation actions.
- Farmers and government extension agents gained increased knowledge on suitable BMPs by attending crop clinics, training programs and seeing crop responses in demonstration plots.
- Significant yield increases (15-30% general and 40-60% rice) in BMP demonstration plots and a relative increase of food production over previous years were realized.



**ANNUAL PROGRESS/PERFORMANCE REPORT BY PROJECT**

**April 1, 2006 – May 15, 2011**

<b>PROJECT:</b>	<b>SRICANSOL II Sustainable Soil and Crop Management</b>	<b>COUNTRY:</b>	<b>Sri Lanka</b>	<b>PARTNERS:</b>	<b>Soil Science Society of Sri Lanka (SSSSL), Canadian Society of Soil Science (CSSS) &amp; AIC</b>
Expected Outputs		Cumulative Outputs			Variance
1. Identify soil fertility constraints and unwise cultural practices that lead to soil/water pollution in major farming/cropping systems.		<p>1.1 Workshops for each cropping/farming system were held with stakeholders (District Agriculture Extension Officers, Irrigation Department Officers, Agrarian Development Officers) to identify the most suitable locations to implement the program.</p> <p>1.2 Data on soil fertility constraints and crop management practices was collected for 8 sub-sites in the following Districts:</p> <ul style="list-style-type: none"> <li>- Polonnaruwa (rice/rice cropping system)</li> <li>- Anuradupura District (rice)</li> <li>- Kandy District (Kandyan forest gardens system, rice vegetable systems)</li> <li>- Gampaha District (fruit cultivation)</li> </ul> <p>The key constraints identified were:</p> <ul style="list-style-type: none"> <li>- Poor land preparation</li> <li>- Low organic fertilizer usage</li> <li>- Improper crop and variety selection</li> <li>- Improper fertilizer, herbicide and insecticide application</li> <li>- Poor soil management</li> <li>- Poor crop establishment and management</li> <li>- Poor irrigation practices</li> <li>- Accumulation of P, K, Ca, Mg and Na</li> <li>- Pollution in surface water</li> <li>- Lack of pruning and training of perennial crops.</li> </ul> <p>1.3 Based on the data, soil maps depicting soil related constraints of different cropping/farming systems and inappropriate agricultural practices were prepared.</p> <p>1.4 Socio-economic base maps and mid-term maps also were developed for each study site.</p>			<p>1.1 Study on intensive vegetable cultivation in Sandy Regosols was not undertaken due to the difficulties in travelling to the conflict zone during the war period.</p> <p>1.2 Study on vegetable cultivation on sloping lands of the central hills could not be conducted due to the lack of a suitable officer.</p> <p>1.3 The Gampaha fruit area was added due to recent importance in the fruit sector, and also to get more female participation in the project.</p>
2. Develop and disseminate mitigation options with farmer participation to improve and sustain crop production with minimal damage to soil and environment in selected farming		<p>2.2 An awareness program was conducted with farmer organizations to develop their engagement with the project.</p> <p>2.2 Considering crop yields and soil fertility limitations, BMPs were developed and introduced on short and long term basis and implemented in the most representative fields in each study site with farmer participation. A BMP package of practices for each</p>			<p>2.1 : Land preparation is linked with water supply in the irrigation system and farmers did not depend on the onset of rains to prepare their fields.</p>

<p>systems</p>	<p>site was developed. For example, in the in the rice-rice cropping system, the following BMPs were introduced with farmer participation:</p> <ul style="list-style-type: none"> <li>- Soil test and target yield based fertilizer application</li> <li>- Application of ZnSO<sub>4</sub> at 5kg ZnSO<sub>4</sub> per ha</li> <li>- Application of organic crop and livestock manure at maximum rates depending on availability</li> <li>- Deep ploughing with disc plough</li> <li>- New improved high yielding rice varieties, including salt tolerant, introduced to replace low yielding varieties</li> <li>- Application of soil amendments (charcoaled paddy husk)</li> <li>- Land preparation with on-set of rains to save water</li> <li>- Cleaning and maintenance of drainage canals</li> <li>- Row seeding</li> <li>- Improvement of irrigation water management</li> <li>- Maintenance of field irrigation canals</li> </ul> <p>2.3 To foster implementation of BMPs, farmer societies were formed or existing societies were strengthened and women’s participation was encouraged. Visits to research stations for farmer groups to learn more about BMPs were arranged. Lead farmers were trained and acted as transmitting agents to disseminate BMPs to farmers in project vicinities. Exchange visits between study sites were arranged for farmers to learn and share experiences. Timing of training sessions was adjusted to accommodate male and female preferences, increasing the ability of women to attend and participate in the programs.</p> <p>2.4 The project introduced an over knee cropping technology for vertical expansion of vegetable crops to overcome the problems of damage caused by small wild animals. A metal frame unit containing 32 soil containers for crops that produced well using the system (chili, capsicum, cabbage, centella and spinach particularly). In addition to those provided to farmers, on the request of the Department of Agriculture, another structure was established at the Natural Resources Management Centre in Peradeniya. Chili grown in one structure yields about 7 kg green chili per crop and gives an income of about Rs 2,100 from only 1.5 m<sup>2</sup> ground space. The DoA has received several requests to replicate this technology to urban home gardens.</p> <p>2.5 The success of a BMP on the integration of ginger and turmeric for spice based forest garden systems was telecast through a weekly 15 minute program “Sengayuna Kahawanu”, for island-wide dissemination of the technology.</p> <p>2.6 Adoption rates for BMPs in specific cropping systems were as follow:</p> <ul style="list-style-type: none"> <li>- 100% for application of N, P and K fertilizer based on target yield in rice-rice cropping system</li> </ul>	<p>Irrigation systems work best as one unit, and the project worked with a small component within the system resulting in a low adoption rate. To implement this BMP successfully, a system approach is required.</p> <p>2.2 Vegetable and potato farmers get high returns for their crops and were less motivated to apply BMPs, also the paid labourers cultivating fields followed landowners’ instructions in preference to site leader’s recommendations.</p>
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	<ul style="list-style-type: none"> <li>- 40% for application of ZnSO<sub>4</sub> to overcome Zn deficiency</li> <li>- 25% for application of organic manure (rice straw, green manure and cattle manure)</li> <li>- 25% for use of disc plough for land preparation (low due to limited availability of implements)</li> <li>- 100% application of soil amendments (charcoaled paddy husk) in rice-rice cropping system</li> <li>- &lt;10% land preparation in rice-rice cropping system to correspond with onset of rains to save water</li> <li>- 30% for cleaning of drainage canal in rice-rice cropping system depending on availability of funds</li> <li>- &gt;95% for introduction of new high yielding adaptable rice varieties</li> <li>- 80-100% in vegetable cropping system, &lt;10% in rice-rice system for preparation of compost</li> <li>- &lt;20% for use of recommended nutrient management package in vegetable cropping system.</li> </ul> <p>2.7 Farmer awareness of BMPs introduced in the fruit spice system was more than 90% and eight of the 15 introduced practices were accepted. 45-65% of farmers adopted four of the introduced practices.</p>	
<p>3. Develop a soil management database and integrate this with the current SRICANSOL digital soil database for decision supporting tools on soil fertility/constraints and soil/water pollution in major farming/cropping systems for higher crop production.</p>	<p>3.1 A structured digital soil management database was developed for statistical analysis using GIS technology (e.g. – thematic maps of soil nutrient status, environmental and social parameters). These maps have been used by site leaders to highlight problems (e.g. zinc deficiencies common in all rice growing areas) and justify the selection of BMPs for that site (e.g. recommended dose of Zn fertilizer and organic compost).</p> <p>3.2 A Memorandum of Understanding was signed with the Department of Agriculture to establish a national database and a land resource management unit housed with the Natural Resource Management Centre.</p>	
<p>4. Educate broader cross-section of the community (policy makers, academics, extension officers, NGO's and farmers) on how crop production and crop productivity improvements can be economically profitable and environmental friendly.</p>	<p>4.1 SRICANSOL II developed a “systems” approach to implementing project activities: strategically identified all agencies and brought together soil scientists, water engineers, health professionals, academics and social scientists to address common issues of land use, productivity, health and nutrition (poverty and hunger) for many rural poor farmers in some of the major agricultural cropping systems in Sri Lanka. Significant in-kind support was leveraged from other agencies and institutes. The concept, approach and methodology were widely accepted as a model for future endeavours in soils and water conservation actions.</p> <p>4.2 Farmers and extension workers increased their knowledge about constraints and suitable BMPs by attending crop clinics, training programs and by seeing the crop response in demonstration plots. Project activities were replicated in farmer fields surrounding the</p>	<p>4.1 Training program for irrigation officers was an unplanned activity. Done on the request of the Irrigation Engineer (an SSSSL member) and jointly funded by SRICANSOL II and the irrigation department.</p>

	<p>study sites to spread awareness on BMPs.</p> <p>4.3 Throughout the project term, 22 field days were held attended by 16 policy makers (12M, 4F), 12 academics (8M, 4F), 130 extension workers (70M, 60F), 309 farmers (194M, 115F); 12 seminars conducted attended by 26 policy makers (18M, 8F), 16 academics (10M, 6F), and 22 extension workers (12M, 10F); 9 workshops attended by 46 policy makers (30M, 16F), 9 academics (6M, 3F), 47 extension workers (25M, 22F); 18 training programs with 21F NGO participants and 222 farmers (144M, 78F); 14 meetings and 35 focus group discussions engaging 27 extension workers (15M, 12F) and 318 farmers (204M, 114F)</p> <p>4.4 SSSSL members increased their knowledge about problems in each study area and the effect of applied BMPs by attending workshops and field programs. Each year, progress review workshops were held. The SSSSL membership comprised of profession soil scientists holding positions at different levels in government departments, research institutes and the private sector attended the workshops and field visits. On average about 60-70 SSSSL members participated of which approx. 1/3 were women. The suggestions, views and comments helped site leaders to improve their programs.</p> <p>4.5 School teachers and students participated in lectures, workshops and field days to expand their practical knowledge of BMPs in situ. As well, research programs were conducted by university students on identified problems at selected study sites.</p> <p>4.6 Presentations made to high level policy makers on the project activities and the effect of BMPs to increase productivity of crops and improve quality of the environment. These included annual presentations to Disciplinary working group meetings of the DoA, articles on project activities, outcomes and achievements presented in the annual Administration Report of the DoA; presentation of project findings to the District Agriculture Committee in Kandy (this is the highest policy-making decision body at the district level where all policy makers, extension officers, research scientists and others are present).</p> <p>4.7 Prepared posters, leaflets, and fact sheets on BMPs to expose a wide cross-section of the communities to the project.</p> <p>4.8 Conducted awareness programs with participating communities and agencies on outcomes of the project and to share the experiences and lessons learned.</p> <p>4.9 The introduced BMPs were replicated outside the project areas on the request of farmers and other implementing agencies (e.g. Mahaweli, JICA, PEACE Project) to demonstrate the effects of BMPs on productivity improvement in agricultural lands.</p>	
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<p>5. Strengthened organization to improve planning, delivery and analysis of programming.</p>	<p>5.1 Regular project steering committee meetings fostered the development of a common methodology for project implementation amongst the various sites and quarterly progress reports for each site were prepared according to established standards.</p> <p>5.2 Local decision making and accountability through sub-site leaders ensured greater efficiencies in delivering the activities of the project and greater efficiencies in the value returned.</p> <p>5.3 Regular professional exchange visits of Canadian partners encouraged cooperation on project design and evaluating progress.</p> <p>5.4 AGMs featured themes with high relevancy (e.g., 2007 “Landslides and better land management to prevent them; 2008 “Water in Agriculture”; 2009 “Heavy Metal Contamination of Agricultural Soils in Sri Lanka”) reinforced by site visits for the participants.</p> <p>5.5 In 2009, SSSSL hosted a successful ITPP IPM and visits to the project sites for the delegates.</p> <p>5.6 Participation of the student chapter of the SSSSL remained high. The student chapter organized a number of exhibits and seminars.</p> <p>5.7 Increased awareness on gender issues among project steering committee and SSSSL membership.</p> <p>5.8 The total membership of the Society which stood at 197 in 2006 (85%M, 15%F) increased to 262 (77%M, 23%F) by 2011. The 25% increase is mainly attributable to the many awareness programs, workshops, progress review meetings, field days, field visits to project sites, seminars, etc. organized by the team leader and site leaders.</p>	<p>Program conducted as scheduled except for delayed printing of the Journal of SSSSL.</p>
<b>Expected Outcomes</b>	<b>Cumulative Outcomes</b>	<b>Variance</b>
<p>1. Increased food security and food access for poor communities.</p>	<p>1. 1 Socio-economic surveys to evaluate food access and availability for poor communities were completed for each site. Results indicate significant yield increases (15-30% general and 40-60% rice) in BMP demonstration plots and a relative increase of food production over previous years. Yield increases reported by farmers for some crops include:</p> <ul style="list-style-type: none"> <li>- Bush bean 50-100%</li> <li>- Pole bean 50-100%</li> <li>- Cabbage 50-100%</li> <li>- Capsicum 100%</li> <li>- Cassava 100%</li> <li>- Luffa over 100%</li> <li>- Radish 100%</li> </ul>	

	<ul style="list-style-type: none"> <li>- Sweet potato 100%</li> <li>- Tomato 50-100%</li> </ul>	
2. Rural household income increased.	<p>2.1 Increased farmer income was inferred by yield increase and the fact that in most study sites, farmer attitudes have changed and they are more positive toward project activities. Unfortunately, specific increases in income often were not quantified as farmers were reluctant to divulge their income to project leaders. However, in Ambaganga (Polonnaruwa District) data was obtained to demonstrate rice yield increases resulted in farmers with monthly income above Rs 10,000 increased from 12-25%.</p> <p>2.2 Ginger and turmeric seed tubers were provided by the project initially to only 4 farmers. Traditional ginger yields 15-20 t/ha but new improved varieties gave yields of 30-35 t/ha. Average cultivation extents in home gardens is about 100 m<sup>2</sup> and tuber yield increased from 150-200 kg to 300-350 kg. Income increased from Rs. 30,000-40,000 to Rs. 60,000-70,000. As a result of this increase, the cultivation of both crops rapidly expanded in demonstration villages. The demonstration farmers use a portion of the harvest from the previous crop as seed tubers for the next crop and sell the rest to other farmers.</p> <p>2.2 Increased crop yields and reduced input costs (reduction in chemical fertilizer application) combine to improve household income. Signs of increased affluence include improved housing, purchase of household items and purchase of cattle.</p>	
3. Successful environmentally sustainable agricultural practices are implemented.	<p>3.1 Composting of agricultural, farmyard and household wastes were adopted by 80% of participating famers.</p> <p>3.2 Compost application improved soil conditions in general and especially water holding capacity, which farmers say is very evident during drought as crops in compost applied plots withstand water stress while crops in other plots withered.</p> <p>3.3 Salinity development in rice fields was reduced through improved drainage conditions in major irrigation schemes.</p> <p>3.4 Abandoned paddy lands were brought under cultivation with the enhanced benefit of reduced mosquito breeding and disease transmission.</p>	

<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>4.1 With the signing of an MoU with the Department of Agriculture, a national database was set up at the Natural Resource Management Centre. This soil and BMP data base developed by SSSSL will be managed and sustained by the Centre. Agreements signed with DoA and the University of Peradeniya acknowledge that the goals, objectives and activities of the project have provided value-added benefits to both the professional and farming communities in Sri Lanka and speaks to the credibility and recognition of SSSSL.</p> <p>4.2 SSSSL was consulted by the District Secretary to identify and help find solutions to soil problems in a new settlement (Puttalama area), and also consulted by the health sector to address kidney disease among farm families in the dry zone. The Society continues to gain visibility and credibility in the area of resource management and is frequently the first agency contacted for expertise in the area of soil and water quality related to agriculture.</p>	
<p>5. Women are active participants and beneficiaries of agricultural endeavours.</p>	<p>5.1 Women were very involved in the awareness programs and training sessions (50 – 73% female participation). Women participated in the discussions, and voiced their views on agricultural and production issues related to family sufficiency.</p> <p>5.2 Most of the agents in the extension system are women and they are directly involved in the project activities and gained improved technical knowledge through the project.</p> <p>5.3 Female membership in SSSSL has increased by 25% during the last five years and more leadership opportunities for women are fostered. At SSSSL’s 40th Annual General Meeting in the spring of 2010, the Society made the unanimous decision to elect women members as President, Secretary and Treasurer.</p> <p>5.4 Five women were involved at high levels in designing and conducting project activities: two as site leaders, (Neelawala and Gampaha), one as a co-leader (Gampaha), another as a co-leader for project data management (Polonnaruwa), and one was responsible for socio-economic activities at Polonnaruwa study site. 42% of site leaders were female.</p> <p>5.5 The project identified a representative to participate in the AIC GEM Working Group. She became a very enthusiastic member who is keen to advance GE within the society and its programs.</p> <p>5.6 An active SSSSL student chapter encouraged women in agricultural studies. The number of female students entering the Faculty of Agriculture at Peradenya University increased by 30% during the past five years.</p>	

Expected Impact	Actual Impact
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<ol style="list-style-type: none"> <li>1. Farmers in the 8 project sites attained <b>economic</b> benefits: Increased crop yields and reduced input costs (reduction in chemical fertilizer application) combined to improve household income. Signs of increased affluence include improved housing, purchase of household items and purchase of cattle</li> <li>2. Farmers in the 8 project sites and their vicinities attained <b>environmental</b> benefits: Application of suitable BMPs resulted in improved soil health, reduced non-organic fertilizer usage, increased nutrient use efficiency leading to improved quality of environment.</li> <li>3. Farmers in the 8 project sites and participants in the SSSSL attained <b>social</b> benefits: Women participated in project discussions, and voiced their views on agricultural and production issues related to family sufficiency; development of local leadership through support to farmer societies and lead farmers; management opportunities for women were fostered within the partner organization.</li> </ol>



## **vii. Community-Based Land Management for Poverty Alleviation in Vietnam (VIETCANSOL)**

This project extended past work on the promotion of on-farm conservation methods and technologies on sloping lands in the northern mountainous area of Vietnam through involvement of farmers in research, demonstrations and training. The project began in 3 core villages: Con village, Thu Cuc commune, Tan Son district, Phu Tho province; Trung village, Binh Cang district, Lac Son district, Hoa Binh province; Phuc Thuong village, Tan Thinh commune, Chiem Hoa district, Tuyen Quang province. It soon broadened to include 5 satellite villages: Que village, Thu Cuc commune, Tan Son district, Phu Tho province; An Phong and Linh An villages, Tan Thinh commune, Chiem Hoa district, Tuyen Quang province; Pay and Khoi villages, Phu Cuong commune, Tan Lac district, Hoa Binh province. The project objectives focused on:

- Advancing farming systems and practices that reduced the rate of erosion and land degradation and, at the same time, improved food production and increased farm income.
- Promoting wider adoption of innovative technologies that have been proven in the field under local conditions, through collaboration between various stakeholders, including researchers, extension workers, farmers and policy makers.
- Enhancing decision-making capacity of women in agricultural practices through their involvement in community women's associations.
- Progressing intergenerational equity by improving the knowledge base of youth and sustaining the agricultural land base for use by future generations.

### **Result Highlights**

- Collaborated with Department of Agriculture extension to organize training courses for 350 local extension staff in three project provinces to improve the knowledge and skills in cropping technologies and training methods.
- Provided over 4,000 training materials on crop and vegetable cultivation, animal husbandry, composting and land management to farmers in project villages.
- Over the project duration, approximately 3,700 farmers participated in field days and field visits while over 1,100 farmers took part in and benefited from Farmer Participatory Research.
- Through the adoption of new technologies and BMPs in participating communities, crop yields increased by an average of 33%. Households with sufficient annual food supply rose 28-48%. Households living in poverty reduced by 47-52%.

**END OF PROGRAM REPORT BY PROJECT**

**April 1, 2006 – May 15, 2011**

<b>PROJECT:</b>	<b>Community-Based Land Management for Poverty Alleviation in Vietnam (VIETCANSOL)</b>	<b>COUNTRY:</b>	<b>Vietnam</b>	<b>PARTNERS:</b>	<b>National Institute of Soils and Fertilizers (NISF) Branch of the Vietnam Society of Soil Science (VSSS), Canadian Society of Soil Science (CSSS) &amp; AIC</b>
<b>Expected Outputs</b>		<b>Cumulative Outputs</b>			<b>Variance</b>
<p>1. A stronger NISF/VSSS Association with more recognition nationally and internationally, increased membership and greater representation of women and youth.</p>		<p>1.1 Throughout the project, NISF collaborated with:                      - Staff of the Agricultural Extension Department in the Ministry of Agriculture and Rural Development (MARD) and local extension agencies to conduct project activities at the project villages/communes;                      - District agricultural extension centres and commune extension staff;                      - Rice hybrid research centre, maize research institute, animal husbandry research institute for training and transfer of new technology and new varieties to farmers.</p> <p>1.2 Eight members of NISF participated on the Scientific Committee of the MARD to establish and revise mechanisms on fertilizer and agricultural land management and to support farmers to apply new technologies in agricultural production.</p> <p>1.3 Over the five years, the project organized 10 professional training courses, 4 scientific seminars and 5 professional exchanges with participation of 120 NISF members (68M, 52F).</p> <p>1.4 Collaborated with Dept. of Ag extension to organize training courses for 350 local extension staff in three project provinces to improve the knowledge and skills in intensive rice cultivation technologies and training methods. Established district research-extension-community network in three project districts. Also, organized an exchange visit for 90 local extension staff on fruit tree demonstrations on sloping land and pig husbandry demonstrations. The number of local extension staff participating in field visits and field days increased from 432 (296M, 136F) to 745 (388M, 357F). The project provided 500 technical books to help extension staff in training and transferring new technologies.</p> <p>1.5 Published 42 scientific papers (authors 22M, 20F) in Vietnam Soil Science Journal, Agricultural Journal of MARD and the Journal of Vietnam Agricultural Science Institute.</p>			<p>The collaboration between the project and national, provincial, district, commune extension, and research institute staff aided greatly in both the dissemination of project results and in the access of the project to new technologies, as well as reducing the stress on project staff to respond to all requests in a large and diverse coverage area.</p>

<p>2. Members of NISF/VSSS have increased knowledge and skills to plan, deliver and monitor participatory agricultural training programs that the community needs.</p>	<p>2.1 Over the five years of the project term, the number of NISF members participating in the project increased from 12 (9M, 3F) to 60 (40M, 20F).</p> <p>2.2 Through regular training activities, these sixty members increased their knowledge and skills in: reliable identification of nutrient deficiencies in rice and methods to overcome the problem, management training, establishing workplans, socio-economic data collection and analysis methodologies, integrated nutrient management, writing scientific papers and Farmer Participatory Research (FPR) activity reports, FPR planning, monitoring and evaluation, reporting FPR results and project activities to farmers and other stakeholders, land use planning and site selection, developing dialogue with farmers and other stakeholders, organizing field days, field visits for farmers and local extension staff, gender analysis, and improving facilitation capacity.</p> <p>2.3 The project regularly conducted two quarterly meetings for discussing the results of the previous quarter and establishing detailed activity plans for the next quarter. The first meeting involved project staff and the heads of village associations, commune extension staff, volunteer trainers, advanced farmers and the head of the village. The second was conducted by the NISF project coordinator with project staff, taking the input from the first meeting to assess and develop detailed plans.</p> <p>2.4 Five members of NISF carried out research for PhD and MSc degrees which will increase the agency’s capacity in soil and fertilizer research.</p>	
<p>3. Increased capacity of village farmer associations (VFAs) to adopt improved management of sloping lands.</p>	<p>3.1 Increased capacity of 150 members of VFAs in eight project villages (increased from 3 core to 3 core plus 5 satellite villages over the project duration). This increased capacity was demonstrated in Commune leaders, farmer and women’s association leaders together with NISF organizing 158 meetings on a range of project topics: village work plan, FPR evaluation, new cultivation technology evaluation, analyzing advantages and difficulties in summer crop production, presenting project activity reports to farmers and other stakeholders, field days and field visits to help farmers, local staff and extension personnel exchange experiences and select corresponding new crop varieties and new cultivation technologies.</p> <p>3.2 Networks of volunteer farmers were developed to serve as “farmer trainers” and to establish farmer interest groups (30-35 volunteer farmers/village). The participants of each training event included extension agents, researchers, farmers (about 80%) and farmer trainers (about 10-15% of farmer participants including youth and women, about 50% each). The project supported women in these activities with the result that 40-60% of farmer trainers were women.</p>	<p>Farmers requested support not only in agricultural field crop and forestry development, but also in animal husbandry. Project required support from multi-disciplinary experts and developed this through collaboration with various government and NGO agencies.</p>

	<p>3.3 These networks were able to transfer new technologies and BMPs quickly to farmers in project villages as well as to other villages and communes. In total, 38 new technologies and BMPs were transferred through this method: New corn variety LVN 8960 and LVN 99, LVN61, NK 66 cultivation technologies; balanced fertilizer application technologies for spring and summer rice, balanced fertilizer application for spring corn and summer – autumn corn on hilly land and cultivation technologies for spring corn and summer – autumn corn, winter corn cultivation technology, winter sweet potato cultivation technologies, sugar cane cultivation technologies, pig husbandry technology, farmyard manure composting technology, spring and summer rice intensive cultivation technology ,tea intensive cultivation technology, cow and buffalo husbandry technology, vegetable cultivation technology, chicken husbandry technology, watermelon cultivation technology, cultivation technology on sloping land, cassava intercropped with peanut, new cassava variety cultivation technology, soybean cultivation technology, using earthworms to solve farmyard manure, peanut cultivation technology, new sweet potato variety cultivation technology, acacia trees intercropped with cassava and tephrosia candida as hedgerow on sloping land, banana cultivation technologies, corn cultivation technologies on drought paddy land.</p> <p>3.4 NISF provided 4,440 training materials on crop and vegetable cultivation, animal husbandry technologies, and farmyard composting to farmers in project villages.</p> <p>3.5 Each project village was provided with a bookcase and technical books (100 each) for reference and supplementing training. Farmer trainers and other extension workers have AV, microphones and amplifiers, for training purposes.</p>	
<p>4. Improved technologies have been measured and evaluated.</p>	<p>4.1 Provided technical support for the preparation of a baseline report that documents farming practices and related crop yields and levels, and conducted farmer field days on collecting data for evaluating the effect of innovative technologies chosen by farmers on their lands.</p> <p>4.2 Provided materials, supplies, equipment and services to support FPR sites and conduct analysis of soil and water samples collected in field monitoring program.</p> <p>4.3 Established an on-farm monitoring protocol for the assessment of yield increases and reduction in soil erosion and run-off for use by farmers participating in FPR program.</p>	

<p>5. Farmers from core and satellite villages adopt recommended technologies from FPR</p>	<p>5.1 Farmers’ interest groups were established to organize group meetings, set activity plans, explain new technologies to the group, transfer new technologies to other farmers (farmers interest groups of 3 core villages and 5 satellite villages organized 92 group meetings on exchanging new technologies, establishing workplans and discussing problems in agriculture production).</p> <p>5.2 In training workshops, field visits and field days, farmers discussed problems and experiences in applying new technologies and BMPs with researchers and extension staff. Advanced farmers, leaders of the villages and communes, heads of location associations, project farmers and also the advanced farmers in neighboring villages participated. Over the five years of the project term, the number of participating farmers in training grew from 32 (32M, 0F) to 5805 instances of farmer participation (2925M, 2880F) and in field visits and field days from 0 to 3727 (1804M, 1923F).</p> <p>5.3 Volunteer farmers gained improved knowledge and skills in new agricultural production and land use technologies, as well as communication skills to explain these technologies to other farmers. Project results, new production and land management technologies were transferred quickly to farmers of project villages as well as to other villages and communes.</p> <p>5.4 Through farmers’ interest groups and volunteer farmers’ help, the number of applied new agriculture production and land management technologies in project villages increased from 0 to 36. The number of participating and benefiting farmers in FPR increased from 0 to 1152 farmers with 3874 instances of farmer participation (1979M, 1895F). The number of farmers who applied new technologies on their own farms increased from 0 to 1925.</p>	
<p>6. Women and youth have increased knowledge and skills and are provided opportunities to directly participate in FPR and other project activities.</p>	<p>6.1 In collaboration with the VFAs, and women’s village associations, identified needs, developed programs, conducted training directed at women and youth in the project villages (10,169 instances of women and youth participation in training, field days and field visits).</p> <p>6.2 To help women attend training, the project tailored presentation methods (illustrative, participative), location and duration (1-2 days).</p> <p>6.3 As almost all the field work in the countryside is practiced by women, FPR is conducted largely by women.</p> <p>6.4 Over the project term, the number of women and young farmers who applied the new technologies increased from 0 to 2,956.</p> <p>6.5 Every quarter, village women’s associations and NISF organized meetings to discuss</p>	

	<p>interests and problems of women in agricultural production. On the basis of the results of the meetings, NISF and the women’s associations defined the follow-up activities.</p> <p>6.6 Supported women’s associations to develop household income through animal husbandry in 3 core villages. Women’s associations of 3 core villages organized 75 households to develop poultry and pig husbandry resulting in a 25-35% increase in household income.</p>	
<p>7. Increased and improved international connections between VSSS and CSSS and between VSSS and other international organizations.</p>	<p>7.1 On-going exchange of ideas/information between Canadian and southern project coordinators included collaboration on an article for the CSSS newsletter (distributed to more than 400 CSSS members) and design of a poster for AIC 2006 conference.</p> <p>7.2 Prior to the 2007 IPM, the CLMPAV delegates promoted the project during visits in Ottawa with Vietnamese Ambassador, AAFC International Scientific Cooperation Bureau and with the AAFC Ottawa Research Centre.</p> <p>7.3 In developing south-south knowledge and experience exchange amongst ITPP land management projects, personnel from NISF, CSSS, SRICANSOL and ETCANSOL participated in an exchange visit with CLMPAV in Vietnam in May 2008. Field review and site visits were conducted. Shared and exchanged ideas and experiences on developing, implementing and monitoring BMPs for sustainable agricultural practices for major agricultural cropping/farming systems in sensitive landscapes in Sri Lanka, Vietnam and Ethiopia. CLMPAV delegates participated in the 2009 IPM in Sri Lanka and shared experiences on organizational assessment process, identification of gender equality issues, performance measurement and reporting on developmental changes. Following the IPM, 4 delegates from Vietnam participated in an extended exchange with SRICANSOL and exchanged experiences on soil management research and extension, research results on tropical soils including lab data, soil survey data and application of technologies to improve soil fertility and increase crops yields. In the spring of 2010 the project hosted an exchange with their Canadian counterpart organization and with delegates also participating from ESSS.</p>	
<p><b>Expected Outcomes</b></p>	<p><b>Cumulative Outcomes</b></p>	<p><b>Variance</b></p>
<p>1. Increased food security and food access for poor communities.</p>	<p>1.1 Over the five years of the project term, increasing crop yields (in comparison to farmers’ practices) as a result of project interventions were assessed as:</p> <ul style="list-style-type: none"> <li>- new rice variety and rice intensive technologies increased rice yield by 19-46%,</li> <li>- new corn variety and corn intensive technologies increased spring corn yield by 23-42%,</li> <li>- sweet potato cultivation technologies increased sweet potato yield by 31-39%,</li> </ul>	

	<ul style="list-style-type: none"> <li>- tea intensive technologies increased tea yield by 32%,</li> <li>- sugar cane cultivation technologies increased sugar cane yield by 24%</li> <li>- new cassava variety and cultivation increased yield by 41-62%</li> <li>- composted farmyard manure for winter vegetables increased vegetable yield by 34-42%,</li> <li>- new soybean variety cultivation technologies increased yield by 34-46%,</li> <li>- peanut cultivation technologies increased yield by 30-32%.</li> </ul> <p>1.2 Adding one more winter corn crop, winter sweet potato and winter vegetable on paddy land in 3 villages increased productivity by 4.2 tons/ha corn, 15.9 ton/ha sweet potato, and 24.5 tons/ha vegetable.</p> <p>1.3 Prior to the project most project village households had 2 meals/day, at conclusion 3 meals/day was common. Average food per capita of core project villages increased 16-33%. Animal protein consumption increased from an average of 1 day/week to 2 days/week. Households with sufficient annual food supply rose 28-48%.</p>	
<p>2. Rural household income increased.</p>	<p>2.1 New agriculture production and land management technologies introduced by the project contributed to increased rural household income:</p> <ul style="list-style-type: none"> <li>- Adding winter corn or sweet potato crop in paddy land and applying spring corn and summer corn cultivation technologies increased household income of participating households by 20-28%.</li> <li>- Applying rice cultivation technologies increased income by 15-20%.</li> <li>- Applying spring corn and summer corn cultivation technologies has shown income increases of 18-25%.</li> <li>- Applying pig husbandry technologies increased household income by 12-15%.</li> <li>- Keeping fish on the paddy land after two rice crops increased participating household income by 12-15%.</li> <li>- Vaccinating chickens reduced chicken deaths by 50-70% and increased household income of participating households by 15%.</li> <li>- Applying soybean cultivation technologies increased household income by 15-20%.</li> <li>- Applying sugar cane cultivation technologies increased household income by 20-25%.</li> <li>- Applying peanut cultivation technologies increased household income of participating households by 18-20%.</li> </ul> <p>2.2 In the three core villages, yearly average income per capita rose 28-36%. Households living in poverty reduced by 47-52%.</p>	

<p>3. Successful environmentally sustainable agricultural practices are implemented.</p>	<p>3.1 After 5 years, applying cultivation and balanced fertilizer application technologies on sloping land and paddy land, the result was reduced soil erosion on sloping land and improved soil fertility and moisture on sloping land and paddy land (increased pH, organic matter, available P and K, CEC and an increase of 6-15% in soil moisture content).</p> <p>3.2 On lands that were largely degraded and limited in agricultural productivity, by applying innovative land and crop management BMPs, using composted local organics and agricultural production technologies to improve soil fertility and crop yield, farmers have increased the value of their land through sustainable land management.</p> <p>3.3 Participating farmers adopted sustainable practices such as planting acacia with hedge rows to reduce soil erosion and increased farmyard composting (from 25 farmers in 2006 to 275 in 2011).</p>	
<p>4. Strong professional agricultural organizations have a positive impact on national regulatory frameworks.</p>	<p>4.1 Memorandum of agreement signed with MARD to collaborate at the national level in order to develop and transfer new technology to farmers. Strengthened collaborations to apply and disseminate new technologies, including those with provincial and district extension agencies, communes, villages, Maize Research Institute, Animal Husbandry Research Institute, Agricultural University No 1 and Tuber Crop Research Centre. Together, they provided training to farmers and to local extension personnel in transferring new technologies to farmers.</p> <p>4.2 Capacity of staff improved through project activities, FPR and professional exchanges, including professional exchanges with scientific colleagues from Canada, Sri Lanka and Ethiopia, and with the Agricultural Forestry Scientific Research and Technology Development Center of Hue University on developing, implementing and monitoring best management practices for sustainable agricultural production.</p> <p>4.3 Eight NISF members participated in a scientific meeting organized by the Vietnam Academy of Agricultural Science and the Scientific Committee in the MARD designed to establish and revise mechanisms on fertilizer management, agricultural land management, and support to farmers to develop and apply new technologies in agricultural production. Contributed to decision-making that will help determine the direction in development of agriculture in Vietnam, particularly in poor, northern regions with hilly farmland.</p>	



<p>5. Women are active participants and beneficiaries of agricultural endeavours.</p>	<p>5.1 Over the five years of the project, women were active participants in project activities: 47-52% of total participants in training; 46-49% of total participants in FPR; 46-51% of total participants in field visits and field days; 35-40% of total participants in community activities are women (previously only 15-25% of participants in community activities were women). Women farmers applying new technologies in agricultural production in project villages increased by 48-75%.</p> <p>5.2 Through participating in project activities and FPR, women’s associations are increasing their capacity to lead women’s groups in applying new technologies, and in establishing and managing credit funds to help women to develop household economies.</p> <p>5.3 Women’s associations in 3 core villages organized training workshops on gender equality in the family, in agricultural production and in community activities in the village.</p> <p>5.4 Project coordinator with NISF is a woman. The project has an active representative on the AIC GEM Working Group.</p> <p>5.5 The NISF developed an organizational gender equality strategy for 2011-2020. By 2020, the goals are to have women in 35% of leadership positions, 30% of women holding advanced degrees, 45% of women members participating in training programs, and 35% of total scientific research subjects and project presided by women.</p>	
Expected Impact	Actual Impact	
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<ol style="list-style-type: none"> <li>1. Farmers in the 3 core and 5 satellite project communities attained <b>economic</b> benefits: Increased income for primary producers, women and men applying new technologies increased household income of participating households by 15-28%, and households living in poverty were reduced by an average of 50%.</li> <li>2. Farmers in the 3 core and 5 satellite project communities attained <b>environmental</b> benefits: Progressive improvements noted in environmental indicators related to soil and water (particularly reduced soil erosion on sloping land and improved soil fertility and water content in sloping and paddy lands); farmers increased the value of their land through sustainable land management practices.</li> <li>3. Farmers in the 3 core and 5 satellite project communities attained <b>social</b> benefits: Through project activities, more women farmers participated in the social activities in the villages, local leadership was advanced through the role of “farmer trainers” and through the strengthening of village women’s associations; and household food security increased through increased crop yields and diversification of agricultural activities.</li> </ol>	

### **viii. Global Project**

The Global Project encouraged collective endeavours for the benefit of all program partners, improved partners' ability to respond to evaluation recommendations, and fostered new contacts and program partners. In particular, the Global Program:

- Provided enhanced support to Southern partner organizations to conduct organizational assessments, advanced gender equality mainstreaming, and supported increased capacity in project management, particularly on partner organizational-level financial systems.
- Provided opportunities for sharing knowledge amongst project partners, particularly through the forum of the bi-annual International Partners' Meeting, and as possible, through other south-south exchanges.
- Supported emerging project partners to develop their capacity for project planning and delivery.

### **Result Highlights:**

- Increased sharing of knowledge, experiences and networks amongst project partners, fostered through two successful International Partners' Meetings that brought together representatives, Canadian and Southern, from each partner organization (2007 Canada and 2009 Sri Lanka).
- Improved project management through development and adoption of standard tools and systems for financial management, organizational assessment, project monitoring and reporting.
- Enhanced program effectiveness through south-south collaboration between Ghana and Tanzania projects, and amongst projects with land/soil management interests.
- Advanced gender equality mainstreaming in both developmental and institutional areas by engaging representatives from every partner organization, AIC's board of directors and staff to guide and advise; by increasing communication with and resources available to all partners; and dedicating staff resources to facilitate a vibrant process.
- Strengthened the capacity of AIC and its partners to understand climate change and to respond with appropriate program and project plans to adapt to or mitigate against climate change by forming the AIC Climate Change Task Team (ACT2), a skilled and committed group of professionals to guide program endeavours.
- Engaged a new Southern partner, Sustainable Agriculture Development Program (SADP)-Nepal and a new Canadian partner organization, the Canadian Society of Agronomy (CSA) with a specific interest in organic agriculture.

**END OF PROGRAM REPORT BY PROJECT**

**April 1, 2006 – May 15, 2011**

<b>PROJECT:</b>	<b>Global – Associations and Professional Exchanges</b>	<b>COUNTRIES:</b>	<b>Ghana, Tanzania, Sri Lanka, Vietnam, Ethiopia, Nepal</b>	<b>PARTNERS:</b>	<b>Agricultural Institute of Canada with all partner bodies.</b>
Expected Outputs		Cumulative Outputs			Variance
<p>1. Program partners demonstrate increased skills, knowledge and capacity to plan, deliver and monitor relevant and appropriate agricultural programs, manage human and financial resources, expand their networks and linkages, provide opportunities for women and youth to participate in and benefit from agricultural programming, ensure environmental sustainability in programming, and influence national agricultural policies.</p>		<p>1.1 Consultations were conducted with all project partners on: Financial management systems; and organizational assessment tools and resources. Tools were developed to support financial management systems (e.g. templates for general ledger, bank reconciliation), and projects received funding support to hire skilled bookkeeping services and/or for training to upgrade in-house skills. Projects demonstrated improvements in financial management practices. The newest partners in Ethiopia and Nepal were able to assume the standard practices from the onset.</p> <p>1.2 All projects completed Organizational Assessments with recommendations going forward to Executive Committees. Organizations moved forward with incorporating recommendations into strategic plans.</p> <p>1.3 A program monitoring travel report format was designed, piloted, assessed and amended. The formal format provided focus for collaborative review, and enhanced project/program reporting by focusing on results. AIC staff and all volunteer Coordinators have incorporated the standard format for reporting on monitoring and professional exchanges.</p> <p>1.4 Increased collaboration between Ghana partners (GhIH and GSAP) was explored during the summer of 2006 to discuss areas of mutual interest and possible programming collaboration. Through additional funding support from CIDA, enhanced south-south exchange for Africa partners (TSAEE, GhIH, and GSAP) occurred in the spring of 2007. The results of this and other (e.g. through IPM) inter-project collaboration is evidenced in an increased sharing of methodologies and indicators between the participating projects in their 2008-09 planning, and in a decision to dedicate resources towards furthering inter-project collaboration throughout the ITPP.</p>			

	<p>Continued support through the Global program was allocated to the GSAP and GhIH projects to pursue their collaboration. The funds are managed within the project budgets with accounting alternating between the partner organizations. This collaboration has allowed participants in both projects to benefit from enhanced livelihood activities. It is providing for efficiencies through joint activities, and potentially more so in the future when combined AGMs are considered. The collaboration also served to strengthen the political leverage of both organizations and acted as a catalyst to advance the formation of an Agricultural Institute of Ghana spearheaded by GhIH and GSAP.</p> <p>1.5 Project partners with soils interests (SRICANSOL, ETCANSOL, and CLMPAV) also participated in s-s exchanges. These projects all have a focus on soil management and improvement but with different designs (e.g. – Vietnam based on community system, while Sri Lanka on crop system). The exchanges provided opportunities to share experiences in soil management and research.</p> <p>1.6 International Partners’ Meetings (IPM) were held in 2007 in Canada and in 2009 in Sri Lanka hosted by the SSSSL and the SRICANSOL II project . Delegates from all projects (Canadian and Southern partners) and project management staff participated in sharing, exchanging and learning. Trainings were provided in results based management, and gender equality; partners presented seminars on topics ranging from group facilitation skills to working with multiple partners. IPM sessions identified approaches to ensure viable and strong professional organizations for the future, presented tools for measuring results in such areas as poverty alleviation and food security, and advanced the development goals and objectives for future ITPP programming. Threaded throughout the sessions was discussion of the continuing need to promote gender equality and engage youth for the future. Another theme was the integration of agricultural adaptation to climate change into program and project goals.</p> <p>1.7 A professional exchange late in 2009 between the Canadian Society for Horticultural Science, the Canadian Society of Agronomy (CSA) and the Sustainable Agricultural Development Program (SADP) in Nepal resulted in engaging a new Canadian partner organization, CSA, in the ITPP and in a new project with a focus on organic agriculture. In the subsequent 18 months, the project entitled “Research and Support to Organic Agriculture in Tanahun District of Nepal”, conducted a needs’ assessment survey with 181 households; established a resource centre and demonstration site; presented three community-level training sessions; and identified outlets for the marketing of organic products.</p>	<p>The Ghanaian partner organizations took the initiative to extend south-south practices to include engagements with other scientific and professional organizations in-country by leading the formation of the Agricultural Institute of Ghana and beyond (GSAP and Nigeria Association of Animal Science).</p>
<p>2. Program participants have increased knowledge and skills related to international development.</p>	<p>2.1 In 2007, an Institutional Analysis (IA) of Gender Equality within AIC was conducted. The exercise resulted in a detailed reflection and assessment of the current state and in a series of seven key recommendations to guide future action. A Gender Equality Task Team (GETT) with representatives from partner organizations, AIC’s board of directors and staff was</p>	

	<p>formed to advance the IA recommendations. A Gender Equality Day at the 2007 IPM, included a Development Roundtable with presenters from different organizations outlining their experiences and addressing gender from both development programming and institutional perspectives.</p> <p>2.2 Gender equality mainstreaming continued with the GETT working on a definition, scope, policy and strategy. The outcomes were presented at an AIC Board meeting in 2008, which adopted an operational strategy.</p> <p>2.3 The GETT was disbanded with the recommendation for a new body – Gender Equality Mainstreaming Working Group (GEM) adopted. Terms of Reference were developed for the GEM and recruitment resulted in membership from partner organizations (both Canadian and international), individual AIC members, Board of Directors and staff. An orientation package for the GEM, and beyond, was developed.</p> <p>2.4 In 2009, the hiring of a (contract) gender equality program officer heightened the vitality and dynamism of the gender equality mainstreaming efforts in both developmental and institutional arenas.</p> <p>2.5 At the 2009 IPM, project coordinators exchanged information on the status of gender-based analysis and training within their organizations and programming and on the availability of in-country funding and expertise. In addition, the GEM Committee – International met in person at the 2009 IPM. Guidelines for improved communication were identified and new international members were added to the Working Group.</p> <p>2.6 With the assistance of gender equality consultants, a case study of AIC’s gender equality mainstreaming to date was developed. The case study was presented to CIDA staff and representatives from other NGOs in the Ottawa area at a brown bag lunch at CIDA in June 2010. The study will be used in the future as a resource for activities including the orientation of all new members to AIC’s board of directors.</p> <p>2.7 In 2010, three re-worked AIC awards (including the International Recognition Award) were announced after being examined with a gender lens – guidelines, nominations and criteria were established through a joint process with Honours &amp; Awards Committee members and GEM members. The next area of study will be that of AIC’s scientific journals. To this end, a small working group was established with representatives from the AIC Scientific Journals (editorial) Committee. As many of the ITPP international partner organizations also produce scientific journals, there will be broad interest in this area of study.</p>	
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	<p>2.8 The GEM produces a monthly newsletter “GEM of the Month” that includes articles of interest, links to helpful resources, and GE updates from partner organizations. The international GEM members are especially active contributors to this resource. A library of gender equality resources has been established on the AIC website and ITPP participants are regularly notified of new additions.</p> <p>2.9 Based on the successful task team approach to gender equality, the ITPP looked to the broad and deep range of expertise of ITPP participants in its approach to integrating effective program responses to climate change. An international call for volunteers interested in participating on an AIC Climate Change Task Team (ACT2) resulted in representatives from all projects expressing their interest in contributing to this work. ACT2 has strengthened the capacity of AIC and its partners to understand climate change and to respond with appropriate program and project plans to adapt to or mitigate against climate change.</p> <p>2.10A session at the June 2010 gathering of Canadian Coordinators looked more closely at what the ACT2 could do to support the ITPP in addressing some of the very challenging and immediate issues. Reliable and accessible information for project partners was highlighted as an important area. Under the guidance of the ACT2, country specific resource handbooks for each participating ITPP country were produced. Information includes the use of introductory principles in climate change, current and climate change projected crop calendars, projected climate impacts and appropriate responses in sustainable agriculture, introductory participatory adaptation tools, and links to country specific reports of firmest scientific and organizational standing. All handbooks were reviewed amongst ITPP partners to ensure the validity of the information. Wider dissemination of the handbooks resulted in the use of the Tanzania Handbook by Oxfam Great Britain in Tanzania.</p>	
<b>Expected Outcomes</b>	<b>Cumulative Outcomes</b>	<b>Variance</b>
<ol style="list-style-type: none"> <li>1. Stronger and more sustainable partner organizations with increased capacity to attain program goals.</li> <li>2. Increased awareness and understanding of international development among AIC partner organizations’ members</li> <li>3. Increased and improved international connections</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Improvements are evident in financial, RBM and narrative reports received from projects. All international partner organizations have completed organizational assessments and are moving forward with strategic plans based on recommendations from the OAs. A particular area of strengthening resulting from the OAs is in improved gender equality within organizations and the engagement of more women and youth as an investment in organizational sustainability.</li> <li>2.1 Through active involvement on the GETT, GEM and ACT2, keen participation in determining focus areas for the IPM, and through discussions, seminars and training within partner organizations and with beneficiaries, partner organizations are engaged with issues that influence the scope of development work, and advance their knowledge and capabilities.</li> </ol>	

<p>among agricultural professionals and associations.</p>	<p>3.1 The positive results of inter-project collaboration, fostered through IPMs and south-south exchange, are evidenced in an increased sharing of methodologies and indicators between the participating projects in their planning, and in a decision to dedicate resources towards furthering inter-project collaboration throughout the ITPP. The projects conceive of themselves as part of a global program.</p> <p>3.2 Projects are taking the initiative to advance regionally (e.g., GSAP advancing West Africa Society for Animal Science, and GhIH taking the leadership in developing a Ghanaian Agricultural Institute), and internationally (e.g. GhIH and SSSSL presentations at international conferences).</p> <p>3.3 Although part of the ITPP for only a short period (approx. 18 months), the newest partner project with SADP-Nepal and CSA was already beginning to see economic, environmental and equality outcomes:</p> <ul style="list-style-type: none"> <li>- through trainings and demonstration sites, awareness grew amongst community members about different technologies and methods for production of organic products;</li> <li>- lead farmers implemented environmentally sustainable production methods; and</li> <li>- women farmers comprised approx. 35% of participants practicing organic farming methods.</li> </ul>	
<p><b>Expected Impact</b></p>	<p><b>Actual Impact</b></p>	
<p>Human well-being, livelihoods and equity are advanced through economic, environmental and social sustainability of rural communities.</p>	<p>The Global Project has contributed to developing the capacity of all partners to attain relevant and effective community-level results through: improving management and accountability systems; advancing cross-cutting themes of gender equality and environmental sustainability; fostering the sharing of experiences, best practices, and lessons learned; and broadening the program impact through the engagement of new partners.</p>	

**E. Risks and critical assumptions identified in Program planning and encountered during implementation, and strategies used to manage these risks**

During the planning and implementation of the ITPP, AIC and its partners encountered several risks and one specific challenge to a critical assumption. During the planning and reporting of the ITPP we referred to the recommendations from the 2005 CIDA evaluation of the 2001-2006 Program which were put into a monitoring grid that was reported on in each semi-annual and annual report. To assist in addressing evaluation recommendations and to give guidance to individuals monitoring projects, a monitoring trip report template was also developed.

The main risks identified in the 2005-6 evaluation by CIDA were:

1. Poor understanding of roles, responsibilities and relationships could lead to conflict and reduce the efficiency and effectiveness of project implementation.
2. If the partnership does not work, there is a risk that projects could be either totally run by the southern partner with the Canadian partner providing funds only or, the other extreme of a project that was totally Canadian partner planned and implemented.
3. If projects are designed and implemented with little or no involvement of beneficiaries in the identification of needs, strategies, planning, monitoring, and assessing results, results may not be relevant to needs and adoption of new technologies and methods could be slow.
4. Inadequate monitoring of projects by southern and Canadian partners would not identify risks, errors or problems and the need for mitigating action.
5. Inadequate RBM reporting (i.e. reporting on activities not change) may not present the results of the project adequately.
6. Lack of connection with local groups and local support to assist with incorporating gender equality in all aspects of projects could limit the effectiveness of gender equality mainstreaming.
7. Limited sharing of ideas, lessons learned, skills and knowledge between projects keeps projects isolated and misses the opportunities for disseminating best practices and improving results.

These risks have been incorporated into the following chart and denoted with an asterisk.

As AIC began the new program in 2006, it had one Critical Assumption which in most cases was correct. AIC assumed that all partners would understand and support the program philosophy of joint partnership, inclusion of beneficiaries in project planning, implementation and assessment, and a frugal style of implementation that did not support offices, staff or four wheel vehicles.



With most projects the partner organizations developed a strong partnership and inclusive processes involving both rural and organization beneficiaries. This style of project implementation was supported by critiquing plans and reports, sharing information electronically and during IPM sessions, monitoring trips and south-south exchanges. In all but one case, this assumption was accurate.

During correspondence, monitoring and reporting of the project in Malawi, it was apparent that the Canadian and Malawian project partners had expectations of operating at a more affluent and hierarchical level and found it difficult to work in the ITTP style. After much discussion and a trial period in which change was required, the project was assessed as not being sufficiently cost effective to be maintained, and the Three Party Agreement with the partners was not renewed for the 2006 to 2011 ITTP.

	RISKS	RISK RESPONSE
<b>Operational</b>	* Denotes <i>potential</i> risks identified in the 2005 evaluation	
	* Poor understanding of roles, responsibilities and relationships could lead to conflict and reduce the efficiency and effectiveness of project implementation..	Three party letters of agreement with AIC, CPOs and SPOs and MOUs with terms outlining roles, responsibilities, accountability and authority were signed at project initiation and reviewed regularly.
	* If the partnership does not work, there is a risk that projects could be either totally run by the southern partner with the Canadian partner providing funds only or, the other extreme of a project that was totally Canadian partner planned and implemented..	
	Difficulties between project coordinating committee members and organizational executives could cause delays or blockages to project implementation.	Roles and responsibilities in decision making and reporting by SPOs and CPOs were clearly outlined in agreements and reviewed regularly. Project teams met with and formally reported to the organizational executives and membership of both SPOs and CPOs.
	A partner organization or key stakeholder, including government, could decide not to continue to collaborate on the project.	SPO coordinators of Projects developed long term MOUs for stakeholders, including some specifically for government departments, explained the benefits to them and had them formally sign the documents to ensure their ongoing, long term support.
	Misunderstandings between beneficiaries and project team members could reduce the efficiency and effectiveness of project implementation.	Introductory and awareness sessions were conducted by SPOs before project activities to ensure a clear understanding of, and agreement to roles, responsibilities, accountability and, particularly for beneficiaries, expectations. Continue engagement with project partners, facilitating communication, feedback and reporting on progress and successes
	Beneficiaries might not immediately see the practical benefits of new technology or methods and do not adopt them.	
	Lack of awareness of partner organization members or rural beneficiaries could make implementation difficult.	
	*If projects are designed and implemented with little or no involvement of beneficiaries in the identification of needs,	Regular consultation and contact by SPOs through extension visits and communication with beneficiaries facilitated their input, views, ideas and

	strategies, planning, monitoring, and assessing results, results may not be relevant to needs and adoption of new technologies and methods could be slow.	concerns at all stages of the project.
	Inadequate public engagement by Canadian partner organization members does not enable the program to deliver public engagement results outlined in the program proposal.	Semi-annual and Annual reports on public engagement were required from all Canadian project partner organizations. Individuals were given assistance and encouragement and reports of all activities of public engagement were shared with all program partners and AIC members.
	Overseas Government program or policies that provide support to the project are changed and, with less support, project results are reduced.	SPO Project partner organization members who are well placed to know what policies are under discussion, informed project coordinators and gave them warning about reduced support or potential new support so the change could be addressed by project plans and either mitigated or acted on.
	Beneficiary groups in project countries dissolve due to high conflict among members.	Project partners identified and made beneficiary group members aware of the activities and benefits for participating and they provided training on leadership, group management and planning strategies to the beneficiaries most committed to the activities.
	* Inadequate monitoring of projects by southern and Canadian partners would not identify risks, errors or problems and the need for mitigating action.	AIC developed a monitoring grid which enabled the tracking of results in addressing evaluation recommendations. AIC also implemented a monitoring trip report format that helped capture the essential information needed to ensure compliance with the Contribution Agreement with CIDA and Three Party Agreements between AIC and project partners.
	* Inadequate RBM reporting (i.e.: reporting on activities not change) may not present the results of the project adequately.	All project partners participated in RBM training during the IPM in 2007 and several received additional training through in-country contacts. ITPP staff initiated formal critiquing of reports to identify areas that needed improvement, ask pertinent questions to extract the information sought and provide examples from other projects to assist project coordinators with improving their RBM reporting. This was done semi-annually.
	The high dependence on key individuals to manage and implement projects jeopardizes project operations if they leave.	Partners were encouraged to establish a group of members involved in the project as coordinating teams to share the workload and ensure that should one member resign, others were able to fulfill the commitments and in kind obligations.
	Overly ambitious project plans are not able to be implemented in the time given.	ITPP staff reviewed and critiqued annual plans and budgets at the beginning of each fiscal year and provided candid feedback on overly ambitious plans with recommendations for adjusting them, based on success from other projects.
	Limited staff or project resources could not address all the requests from beneficiaries, reducing the level of results.	Projects initiated partnerships with government (especially extension services) and NGOs operating in the same geographic areas to participate in implementing training and extension activities and

		developed farmer to farmer training to meet more beneficiary needs.
	Political instability in the country could delay implementation.	During times of instability project activities were limited to safe areas within a country. While this did delay some activities and shift the geographic focus for target groups, results were still achieved (Sri Lanka). Scientific society networks cross political boundaries which enabled project partners to work with all factions. However, one location could not proceed due to travel restrictions.
	* Limited sharing of ideas, lessons learned, skills and knowledge between projects keeps projects isolated and misses the opportunities for disseminating best practices and improving results.	Project information was freely exchanged electronically and face to face during two International Partner Meetings and five south south exchanges. The summary of lessons learned throughout the program will be shared with all partners as part of the final report.
	Women, youth and marginalized groups do not participate in project activities.	Project plans and strategies included activities to involve marginalized and vulnerable groups such as working with specific focus groups and education, awareness and training on gender equality. Gender equality training and increased awareness facilitated the skills of SPOs in working with women beneficiaries.
<b>Reputation</b>	Project activities or promotion could negatively impact the reputation of CIDA, AIC, Canadian partner organizations or southern partner organizations.	Promotional materials, presentations and publications were shared jointly among project coordinating committees and with partner organizations. AIC reviewed annual plans and budgets and discussed any areas of potential negative impact. When in doubt about protocol or appropriate action, project partners consulted AIC and, if needed, AIC consulted CIDA. SPOs met with CIDA representatives in-country periodically to inform them of project progress.
<b>Financial</b>	Corruption or malfeasance would cause a financial loss.	Clear financial guidelines, roles and accountability were outlined in the Three Party Agreement. Projects used proper accounting procedures and policies to guard against error or mismanagement and both the Canadian and Southern project coordinators monitored finances closely. AIC and the Canadian partner monitored financial management through the quarterly reports and, during project monitoring trips and professional exchanges the financial records were reviewed to ensure proper procedures were followed, expenditures were valid and financial records were accurate.
	Low in kind contributions from partners would make it difficult for AIC to meet its contractual obligations to CIDA.	Partners were encouraged to have a group of members involved in the project to share the workload and ensure that should one member resign, others were able to fulfill the work and in kind obligations. Quarterly in kind reports were completed by all Canadian and southern partner organization

		members involved in project activities.
	Inflation would put costs over budget.	Because projects budgets are in Canadian dollars, the more severe inflation changes are covered by a better exchange rate. Annually expenditures to budget for the previous year and plans for the upcoming year for each project were reviewed by AIC staff and adjustments made to address any severe inflation impacts.
	Project partners could take on a financial risk when directly assisting beneficiaries with micro credit.	Project partners identified NGOs who support rural development with micro credit systems and made beneficiaries aware of the new and increasing opportunities with banks which provided small producer loans for agricultural initiatives.
	Changes in market value for agricultural goods and services could reduce project results for sustainable economic activity.	Beneficiaries were encouraged to diversify income activities and identify wider market opportunities.
	Wide replication of an activity by other farmers could result in limited long term profit for a specific initiative.	Beneficiaries were given training in financial record keeping and analysis to adapt or shift to new production areas that would be competitive. Diversification of income activities was encouraged.
<b>Development</b>		
	Misunderstandings between beneficiaries and project team members reduces the efficiency and effectiveness of project results.	Introductory and awareness sessions were conducted before project activities to ensure clear understanding of, and agreement with, roles, responsibilities, timelines and expectations.
	Beneficiaries do not immediately see the practical benefits of new technology or methods and do not adopt them.	Facilitate sessions on group dynamics and participatory development processes (democratic procedures).
	Lack of awareness of partner organization members or rural beneficiaries makes achievement of results difficult.	
	* Lack of connection with local groups and local support to assist with incorporating gender equality in all aspects of projects.	All project partners were tasked with identifying local organizations and groups with gender equality expertise they could partner with and/or get assistance from in promoting gender equality. Each SPO identified a member to join AIC's GEM Working Group.
	Results could be constrained by poor inputs such as low quality genetic stock or seeds.	Project partners assessed input needs and recommended and helped beneficiaries to procure high quality, appropriate inputs.
	Conflict over land ownership or control could decrease the incentive to improve soils and the environment.	Projects became familiar with local legislation related to land and land acts, disseminated the information, land use plans and maps and determined what were beneficiaries' areas of ownership and control of land.
	Domestic work could conflict with women's ability to participate in and benefit from project activities.	Projects shared successes and implemented adjustments such as giving greater flexibility to times and scheduling of project activities. Use of flexible training schedules for women farmers; involving women in program planning; seeking time-saving technologies
	Gender tensions develop in communities where women are not encouraged to	Projects introduced discussions and training on gender equality for rural beneficiaries and made

	participate and tensions make project implementation difficult.	groups aware of the laws and the rights of women and men.
	A lack of adequate support for increasing commitment to and incorporation of gender equality into AIC programs and operations could severely limit planned results for gender equality.	ITPP staff were very strategic in introducing the concept of gender equality to AIC. They began working with supportive staff and chose champions to work with in specific programs (Honours and Awards) and groups (Board of Directors). Developing a Gender Equality policy and promoting it to the Executive Director and Board was very instrumental in starting the mainstreaming of GE in AIC. Ongoing communication and publication of activities and results helped to build momentum. Setting examples at the AIC organizational level helped to give AIC credibility when promoting gender equality with partner organizations. For more specifics refer to the section F on Gender Equality.
	Natural disaster or major climatic events set back accomplishments	Several project areas were impacted by severe climatic events – lingering effects of the Tsunami in Sri Lanka, drought and floods in Ghana, irregular rainfall patterns in Tanzania. Projects adjusted training topics, introduction of technologies and activities to match the shift in environmental capabilities and beneficiary needs. The most successful mitigation plan was to encourage diversification of agricultural activities.
	Project activity may have a negative impact on the environment.	Project partners had a high awareness of the potential negative impact on the environment. They assessed results and environmental changes and promoted environmentally appropriate technology and practices.

## **F. Analysis of gender equality issues and results in the Program overseas and in Canada**

### **i. Gender equality results and issues overseas**

This section of the End of Program Report for the ITPP summarizes and provides examples of gender equality results in overseas program locations.

Data on gender equality results was gathered by each SPO late in 2010 or early 2011. It was analyzed by project coordinating committee members with particular attention to Decision Making, Rights, and Resources and Benefits, which includes livelihoods,

institutional capacity, policy change and well-being and basic needs. It is organized on the following framework:

#### **1. Decision-making**

- 1.1 Capacity for public participation
  - A. Within the SPO
  - B. Within the rural beneficiary population
- 1.2 Representation among decision-makers
  - A. Within the SPO
  - B. Within the rural beneficiary population
- 1.3 Household and individual decision-making
  - A. Within the SPO
  - B. Within the rural beneficiary population

#### **2. Rights**

- 2.1 Public awareness
  - A. Within the SPO
  - B. Within the rural beneficiary population

#### **3. Development resources and benefits**

- 3.1 Livelihood and productive assets
  - A. Within the rural beneficiary population
- 3.2 Institutional capacity
  - A. Within the SPO
  - B. Within the rural beneficiary population
- 3.3 Policy change
  - A. Within the SPO
  - B. Within the rural beneficiary population
- 3.4 Well-being and basic needs
  - A. Within the SPO
  - B. Within the rural beneficiary population

## 1. Decision-making

### 1.1 Capacity for public participation

#### A. Within the SPO

All SPOs have collected Gender Disaggregated Data (GDD) on their members. Six of the organizations have female membership ranging from 20% to 30%. The seventh organization has a 3% female membership. Some individual branches of SPOs have higher female membership than the national SPO and all SPOs have seen an increase in female membership over the project period.

Increased female membership in SPOs has created a more supportive environment for women scientists to participate in the scientific societies/organizations. This increase has occurred because of strengthened capacity of organizations to seek women's input and because of female scientists' strengthened knowledge about the need to participate in professional organizations.

Male colleagues within SPOs still predominate with membership ranging from 58% to 97%. This female membership (of 3% to 42%) is representative of the percentage of female graduates in post-secondary studies in agriculture in partner countries. One reason for low female membership in an SPO is because of traditionally low numbers of female graduates (potential SPO members) in agricultural, horticultural, extension, soil science, animal science or natural resource studies and in Bachelor's, Master's, PhD and diploma programs in universities and colleges in project countries.

Through focused attention on recruiting female members, membership within SPOs is shown in the following examples from projects:

<b>Project</b>	<b>Capacity for Public Participation Results</b>
GSAP	The percentage of women members to men increased (total of all members was 58 in 2003 to 135 in 2009 to 164 members in 2010) for a total of 27% female membership as a result of gender initiatives and activities targeting females.
GhIH	Female members (full plus student) increased from 77 to 99 (20% to 22% of the total membership) which is representative of female university graduates in horticulture in Ghana.
ETCANSOL	The female membership grew from 3% (out of 340 members) in 2010 to 5.5% (out of 491 members) in 2011; 14 women joined in the past year for a total of 27 female members. Of the 14, 8 came from Hawassa node; 3 from Bahir Dar node; 3 at the 2011 AGM. These are women scientists working in national research centres across Ethiopia. The SC has worked through key members at these centres to identify women professionals; make them aware of ESSS goals and activities, and seek their membership and willingness for involvement in leadership positions within the society.

ETCANSOL	Five nodes have been established in different geographic coverage representing five directions (east, north, north west, south and central). To date, node launching activities have been carried out in two locations - Hawassa and Bahir Dar. Of the two, Hawassa has 20 new members, of which 8 are women (40%); Bahir Dar has 45 new members of which 3 are women (7%). Baseline for the other three will be determined over the next several months of 2011.
SADP	There are 45 general members and more than 50 international volunteers from different parts of the country associated with SADP. There is 30% female participation in the membership ranging in age from about 20-70 years age from different geographical regions of Nepal.
VIETCANSOL	Some individual branches have female membership as high as 42% (e.g. VSSS-SFRI). Overall, VIETCANSOL has 30% female membership out of 1000 members.
TSAEE	TSAEE female membership has grown to 23% overall in three zones. ( 21% female membership in 10 districts in the Lake Zone , from 20% in 2006 to 40% in 2011 in the Western Zone and a decrease from 33% in 2006 to 15% in 2011 in the Central Zone due to increased number of male members while female membership has remained constant.
SRICANSOL	SRICANSOL has grown to 20% female membership out of a total of 257 members. <i>An example of participation:</i> The Progress Review Workshops were held in February every year commencing 2006 up to 2010. The SSSSL membership comprises of professional soil scientists holding positions at different levels in government departments, research institutes and the private sector. Hence, the workshops and field visits helped the Project team to showcase project outcomes to a professional audience. On the average about 60 to 70 SSSSL members participated of which about one third were females. The suggestions / views and comments of the members helped site leaders to improve their programmes.

## B. Within the rural beneficiary population

Increased or maintained numbers of rural women beneficiaries within each project has led to their increased capacity to participate in projects and ability to benefit from agricultural endeavours. This is evidenced by women farmers as peer trainers, as contributors to radio broadcasts, adopters of new technologies, as group members and leaders, as participants in field days, field visits, and farmer participatory research (FPR), as entrepreneurs, and as marketers and exhibitors of agricultural products.

Examples of results from projects:

<b>Project</b>	<b>Capacity for Public Participation Results</b>
GSAP	The total number of women group members was 743 in 25 communities during the current project phase.
SADP	38 women farmers out of 60 farmers are members of 6 farm groups. At the community level, 67% are female members involved actively in groups. One group (Darai Organic Farmer group) was initially formed with only female farmers.



SRICANSOL	<p>Involvement of women only in selected agriculture activities (weeding, transplanting, and cleaning of harvest) is a common phenomenon in almost all farmer families. Women in farming communities have been actively involved in the awareness and training programs conducted in almost all study sites (50 – 73% female participation). Women participated in the discussions, and voiced their views on agricultural and production issues related to family income. During the period of the project there was a significant increase in the participation of farm women in agricultural activities such as weeding, harvesting and processing. This was because the women realised the beneficial effects of the BMPs on crop yields and believed that their involvement in farming could increase family income further.</p>
GhIH	<p>51% of direct beneficiaries surveyed are female and belong to a farm organization. In 2006, the total number of water users (direct and indirect farmers) at the village sites totalled 761 (Busa, Karni, Babile, Nandom- Pataal, Nandom-Brutu). Women totalled 506 (66%) and men totalled 255.</p> <p>The active recruitment of women at the community level has led to very active women peer trainers at Busa, Babile and Karni.</p> <p>Another area that the project used to address gender equality is through radio broadcasts. As women have very busy domestic schedules they are not able to travel to participate in live recordings at the radio stations. In field tape recording of discussions, women voices are given priority. In community drama for radio recording at Busa 7 out of 9 participants were women.</p>
VIETCANSOL	<p>The participants in the project ranged from 45% to 53% female based on total numbers ranging from 282 to 889 participants per village.</p> <p>There were 2496 instances of women and youth farmers participated in the field days and field visits to observe 22 technology results on the field.</p> <p>There were 2510 instances of women and youth farmers participated in FPR to carry out 38 technologies.</p> <p>During this time there were also 1412 women (1060) and youth (352) farmers who benefitted from FPR and related project activities in three villages in 2011 (from 0 in 2006). Farmer interest groups are conducted mostly by women. As “farmer trainers”, volunteer farmers gain improved knowledge and skills in new agricultural production and land use technologies, as well as communication skills to explain these technologies to other farmers through information dissemination.</p>
TSAEE	<p>22 women’s groups and 13 youth groups have been formed representing 193 women or 67% of participants.</p> <p>All rural women participants within the project indicated that they operated as individuals in household farms in 2006, but as a result of group mobilization, training, and extension, all women participants describe that they now work cooperatively amongst their fellow members. This is a supportive environment for community and group sustainability and enhanced entrepreneurship</p>
TSAEE	<p>Increased mobility and capacity in public life is evidenced through women’s increased participation and travel to agricultural shows. In 2007, TSAEE facilitated the travel of 10 project participants (5 women) representing 5 groups to Arusha and Moshi to participate in a national agricultural show. In 2008, TSAEE facilitated 10 groups (5 women) in Magu, Ukerewe and to participate in a regional agricultural exhibition. Groups displayed their products, gained exposure to new ideas, contact to NGO’s and access to government services. As a result of facilitated exposure, all interviewed groups (193 women or 67% of participants) in Magu, Ukerewe and Misungwi report that they now regularly attend their annual district agricultural shows (Nane Nane, Saba Saba).</p>

## 1.2 Representation among decision-makers

### A. Within the SPO

Female members had increased opportunities to become decision-makers within their member organizations because of concerted efforts to increase their representation. This is evidenced by the number and proportion of women scientists who were elected to executive councils by members within their individual scientific societies/organizations.

It is also reflected in the increased number of women who volunteered to become members of the individual project coordinating committees, project steering committees, as project coordinators or site leaders, as trainers, and as project evaluators.

TSAEE, GhIH and GSAP identified volunteer members to join AIC's Gender Equality Task Team (GETT) in 2006. (See Canadian results on gender equality for an explanation of GETT and GEM Working Group.) Each SPO identified at least one member to volunteer as a member of AIC's Gender Equality Mainstreaming (GEM) Working Group. This includes TSAEE, GhIH and GSAP in 2007; SSSSL, VSSS and ESSS in 2009 after the IPM; and SADP in 2010 when it formed a partnership with AIC and CSA.

In a third area of decision-making, the number of women members serving on various national agricultural committees and in leadership positions in government institutions increased.

Examples of results from projects:

<b>Project</b>	<b>Representation Among Decision Makers Results</b>
GhIH	Female members on Council increased from 2 in 2006 to 5 in 2011 representing 12.5% and 31.3% respectively. This is due to recognition of female participation at AGMs reflecting in the increase in their attendance and their commitment to the progress of the institute.
GhIH	Women have been President of the organization for 8 out of the 13 years of its existence. Within 2006 to 2011, 2 out of the 3 GhIH National Presidents were female. The President of the KNUST student group is a female. The group came out with a 5-year Strategic Plan for the entire Student Group, and also developed a Student Guide to regulate the affairs of the group.
GSAP	GSAP Executive Council encouraged women to take up leadership positions in the society during the 2010 AGM. Four women have expressed interest in holding executive positions in GSAP. This resulted from of the announcement at the 2010 AGM of the society's programme to encourage and attract women into the executive positions. Number of women on the PCC increased from one to two out of seven members.
GSAP	The number of women in GSAP and women serving on various national agricultural committees and in leadership positions in government institutions increased from 4 to 8. Eight GSAP members (including 2 women) headed government institutions – Animal Research Institute; Faculties of Agriculture, University of Winneba, UDS, Univ. of Sci. & Tech, Kumasi; Animal Production Directorate of MoFA; Provosts of College of Agriculture and Consumer Sciences, Legon and School of Agriculture and Renewable Resources, Kumasi; Millennium Challenge Account, Agric. Sector. Two members served on the National Poultry Development Board and four as heads of Animal Science Departments of the state owned universities.

TSAEE	<p>A 2009 gender audit of TSAEE by Oxfam GB identified that the percentage of women in TSAEE’s leadership was 40% at the time of the audit. [This compares to the Tanzanian average where, of 30 participating NGOs in the audit (totalling 549 people in leadership roles), the average was 41% of women in leadership roles.] For increased participation in decision-making, as of March 2010, TSAEE Lake Zone elected 3 women on its 7 person executive committee: as Vice-Chair, as Treasurer and as member at large, for a percentage of 43% in elected leadership roles. This is an increase from 2006 when 2 female (29%) and 5 male (71%) held elected executive positions. While this marks slow increases to the number of female leaders on the Lake Zone Executive, it should also be considered that terms of office are for periods of 3 years. TSAEE has indicated that it is part of their strategy to emphasize and support the leadership of women into greater roles of decision making at the next AGM for election of leaders in 2013.</p>
TSAEE	<p>Within the volunteer project steering committee at Ukiriguru, male and female membership has remained constant amongst 6 TSAEE members (2 female [1 financial Officer] or 29%, 5 male or 71%). The membership on the project steering committee is nearly identical to that of the gender composition of membership in the Lake Zone as a whole (21% female, 79% male) and can therefore be considered highly representative of the TSAEE Lake Zone member population.</p>
TSAEE	<p>In the concluding year of the project (2010-11) wherein planning processes have been undertaken in proposal development for the next five year phase, there is an increase in the number of both men and women on the proposed Project Steering Committee (3 female [1 financial officer], 6 male) (25% female, 75% male). Of the 9 volunteer district coordinators for this project, 4 are women (or 44%) and are located at Magu, Mwanza City, Tarime, and Sengerma. This is double that of the percentage of TSAEE women general members (21%). This would appear to be a result of TSAEE practices in encouraging and supporting the engagement of members based on an individual’s personal motivation as opposed to strict demographic targeting. Further this speaks to the high commitment and dedication of female agricultural professionals in Tanzania to take the lead in fostering change for rural life improvement.</p> <p>The visibility of women in active leadership positions at the district/branch level amongst general TSAEE members has been highly effective in positively demonstrating the opportunities and abilities possessed by women in TSAEE on a day to day basis. 100% of TSAEE members engaged in evaluation interviews in Magu, Ukerewe, Tabora and Singida (35/35; 7 female [20%], 28 male [80%]) indicated that the voice of women is equally respected within their TSAEE branch. This result is particularly significant given the higher percentage of male respondents; all of whom were very vocal in their statements that they admire the work of their female colleagues and want to see more female members in TSAEE.</p>
VIETCANSOL	<p>Over the five years of the project term, the membership of the PCA (VSSS and NISF branch of the VSSS) participating in the project increased from 12 (9 male, 3 female) to 60 (38 male, 22 female).</p> <p>The project coordination team in Vietnam included 3 females and 4 males, and was headed by a female.</p>
SRICANSOL	<p>The Project steering committee was comprised of 11 members of whom 3 were females. 5 out of 19 members of the project coordinating committee were female.</p> <p>Five women are involved at the decision making level in project activities: 2 of the total 6 site leaders (Neelawala and Gampaha), 1 co-leader (Gampaha), 1 co-leader cum project data manager (Polonnaruwa) and 1 responsible for socio-economic activities at Polonnaruwa study site.</p>

SRICANSOL	For the first time in 40 years, SSSSL which had a membership of 203 males (78.4%) and only 56 females (22%), opted to have a female President at the 2010 and 2011 AGMs. Female members were also elected as Secretary, Treasurer and for two committee posts. Hence, the SSSSL Executive Committee comprised of 14 members has 5 females.
SADP	At organizational level, 50% female members of project steering committee are in executive positions. Among the board and general members of SADP, there are 7 female members in total out of 45 members. This is an increase after the commencement of project from 1 female member. The project manager of SADP is female. There are three female trainers and two male trainers for organic farming.
ETCANSOL	There is one young woman participating as a steering committee member of the project since the beginning of the project in 2008.

## **B. Within the rural beneficiary population**

Rural female project participants had increased opportunities to become decision-makers within their communities because of concerted efforts to increase their representation. This is evidenced by the increased number of women elected to community associations with connections to project activities, by recognition of women's groups by village leaders and by the establishment of elected leaders within women's groups.

Rural women played increased roles and experienced greater opportunities to participate in community decision-making as volunteer peer trainers, farmer interest group members, community mentors, and participants in community land planning, Issues identified within several projects include:

- Literacy levels of farmer trainers affected who were chosen to be a farmer leader, with women's participation ranging from 40 to 60%. (VIETCANSOL)
- At the level of the village, women reported that they were approached informally to contribute to larger land use plans, but they do not regularly participate in formal village agricultural planning. This highlights the gap in gender equality at the village level, and the need for ongoing gender equality training with village leaders who are mostly male. (TSAEE)
- Provided that election processes in leadership and group planning are undertaken by democratic processes it can be surmised that male leadership selection is viewed as a cultural norm. It is suggested that TSAEE continue efforts to promote leadership amongst female participants to reflect numbers more closely proportional to gender based demographics within groups while maintaining democratic processes that avoid leadership appointments on strict gender definitions. (TSAEE)
- In available group leadership positions, women occupied about half of these roles, despite being two-thirds of the participants. This represents the need for further questioning of groups to determine why women are unequally represented and what targets they would like to set for their groups in the next phase. (TSAEE)

- One issue was identified in the VIETCANSOL project in one geographic area where change in gender s represented as site coordinators was occurring but slowly. The coordinators summed it up by stating “It needs time to change the people’s habits. It is a process”.

Further examples of results from projects:

<b>Project</b>	<b>Representation among Decision Makers Results</b>
GhIH	In Karni, over 80% of the gardeners are women and 7 of 9 executive members of the Water User Association are women who strongly influence decisions in water use, crop selection and training programme planning.
SADP	There are 3 female and 4 male lead farmers in 7 farmers’ groups. The lead farmer (who is self-motivated and can motivate other farmers) has decisive power for the betterment of the group and village.
TSAEE	Groups engaging in mentorship commonly describe that both their female and male members have improved status as community leaders as a result of participating in the project. 48% of women participants were actively involved in mentoring other community members in entrepreneurship, group formation and production practices within 5 km of their villages. This represents both increased leadership in skill development and increased mobility outside of the home and community
TSAEE	100% of interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) further stated that women are highly valued as land planners. However, the degree to which women participate in land planning (crop selection, area of production, etc.) was highly variable amongst individuals. While all women interviewed reported that they participate in agricultural planning, the degree of formal channel and networks that they access to do so was differentiated. At the level of the groups, women stated they participate fully as equals in all land planning activities. This enforces the value of working with groups to support women’s increased and ongoing participation in land use planning. Female participants (39%) indicated that their groups are recognized as active community organizations by their village representatives.
TSAEE	Leadership amongst women and youth groups was facilitated by TSAEE in the employment of democratic processes amongst participating group members to elect a President/Chair, Secretary, and Treasurer. As a whole, the percentage of women participating in the project (67%) is unequal to their representation in leadership positions within group organizational structures of power.
TSAEE	When information related to leadership is further disaggregated to reflect adult and youth group composition, it is observed that women represent 53% of youth participants (69/130 while occupying 14% (3/21) of available youth group leadership positions.

TSAEE	<p>While disparities in gender composition between membership and leadership are clearly visible by number, the importance of women as decision makers was recognized amongst all participants. It was also observed throughout evaluation processes amongst interviewed youth groups, female members were very vocal in their participation and contributed information freely.</p> <p>The value of female member participation amongst youth groups was further observed in practice amongst Ufundi Youth Group in Misungwi who at the outset of the project in 2006 were composed of 7 males. At the conclusion of the project in 2011 they have 2 female members – both of whom are general executive members who attend and vote at meeting of Ufundi Group’s executive. This demonstrates a change in the perspective of males to recognize that life improvement depends upon including all household members (i.e. female counterparts) in the activities of their group.</p>
TSAEE	<p>All women’s groups participating in the project from Misungwi (5 groups representing 50 females), have collectively come together to form a Women’s Network Association. This larger organization is composed of member representation from 18 women’s groups in Misungwi who have participated in past projects with TSAEE supported by AIC’s ITPP projects. As a result of their experience in the increased skills and abilities gained by working cooperatively, these women have identified that creating their own independent organization allows greater networking opportunities amongst themselves while lending further credibility to themselves as a formalized body that is able to access funds from larger traditional lending services.</p>
VIETCANSOL	<p>The capacity of 150 members (65% are women, and youth) of VFAs of 8 project villages was lacking before project implementation. VFAs transferred new technologies to farmers of 8 other villages by inviting them to participate in their field days, field visits and in meetings on FPR result evaluation. During the whole project time improved capacity of village leader, farmer and women association leaders of project villages in community activities, transferring new technologies.</p>
VIETCANSOL	<p>In the countryside most field work is practiced by women farmers who were also very active participants in field days. These were conducted to see the demonstration sites and FPR sites. The farmers together participated in harvesting crops, weighing, collecting, taking notes to compare and find the best / proper technologies which had the highest economic crop yields. The women farmers played a key role in field activities.</p>
VIETCANSOL	<p>There are differences in the number of women participants in the project committees. It depends on the attitude of people and people’s gender equality habits in different locales and the capacity of the women. Before the project, leadership activity participants were all men (100%) in Hoa Binh site. Now there was 1 woman out of a total of 6 members on the project site coordination team.</p> <p>At Phu Tho site, there were 2 women out of a total of 5 members on the project site coordination team.</p> <p>At Tuyen Quang site, there were 2 women out of a total of 5 members on the project site coordination team.</p>



VIETCANSOL	<p>Developed networks of volunteer farmers to serve as "farmer trainers" and established farmer interest groups (30-35 volunteer farmers, of which 62% are women mostly advanced farmers). Farmer interest groups were conducted mostly by women. It depended on the crops which were cultivated in the field and the type of animal husbandry to organize the composition of these groups. Volunteer farmers gained improved knowledge and skills in new agricultural production and land use technologies, as well as communication skills to explain these technologies to other farmers through information dissemination. Through networks of volunteer farmers, CLMPAV project results and new agriculture production and land management technologies were transferred quickly to farmers of project villages as well as to other villages and communes. Farmer's interest groups and volunteer farmers of 3 core villages and 5 satellite villages organized 92 group meetings on exchanging new technologies, establishing work plans, problems in agriculture production and land management. Over the five years of the project term, owing to Farmer's interest groups and volunteer farmers' help, the number of applied new agriculture production and land management technologies in project villages increased from 0 technologies to 38 technologies. The number of participating farmers in FPR increased from 0 to 1152 farmers (3874 instances of farmer participation: 1979 male, 1895 female). The number of farmers who applied new technologies on their own farms increased from 0 to 1925 farmers (4462 instances of farmer participation: 2112 male, 2350 female).</p>
VIETCANSOL	<p>Trainers of trainers participants of every training event include extensionists, researchers, farmers (about 80%), especially farmer trainers (about 10-15% among farmer participants including youth and women, about 50% each). The selection of farmer trainers was based on the capacity of individual farmers. They are literate farmers, and mostly selected from volunteers, by discussion at the meeting of local staff and social associations and group farmers. 40-60% of farmer trainers are women. To multiply the project results it is a good approach to have more and more trainers of trainers. Volunteer farmers agreed to become farmer trainers without financial incentives. They valued the training opportunities and contact with other farmers, researchers and extension personnel. They also benefited from visiting other farms and exchanging experiences that could be applied in their own fields.</p>

### **1.3 Household and individual decision-making**

#### **A. Within the rural beneficiary population**

Rural women's participation in agricultural endeavours influenced their ability for increased decision-making capacity and independence within the rural context. This was described in end of project reports as improved peace in the household, increased respect, greater appreciation for women's workloads, differing skill and technology adoption, sharing of benefits/income with the household, and participation in household land planning. Women's increased access to improved technologies created greater opportunity for engagement in productive income-generating activities.

This is indicative that improved income earning ability amongst women in rural households is an effective means of fostering greater equality within households. The earning ability of women increased their confidence, security and status within the household and community.

Examples of results from projects:

<b>Project</b>	<b>Household and Individual Decision-making Results</b>
GhIH	Initially, some males accompanied their female partners who were participants in the training. This changed later and females were permitted to travel to participate in training events unaccompanied.
GhIH	There were gender differences in the changes noted as a result of DSVP activities. In the end of project survey, more males than females noted the changes in increased food security, improved environment and rural community development. More women than men noted the changes in income, employment and livelihood.
GSAP	Women beneficiaries met pressing needs of their households, and are usually respected by their husbands. They are consulted by their husbands before certain household decisions are arrived at.
SADP	55 (28 male and 27 female) communities members are aware that different technologies and methods for production of organic products and are willing to adopt them to sell organic produce and increase their income.
SADP	3 woman of Darai village farmers group decided to establish a shallow dug well in their village. The female members of Darai Farmers groups strongly decided to establish the shallow well in a farmer's field.
TSAEE	All interviewed participants (48% women) describe that they share the benefits of their increased incomes (homes, food, education) to improve the lives of their families. It can be estimated that the 287 participants in this project share the benefits of their efforts with an additional 1,951 men, women and children in their respective households. All women interviewed describe that they make decisions to the investment of their income cooperatively with their partners and maintain that they possess the final decision as to how their funds will ultimately be spent. Although women reported that decision-making about finances is shared at the household level, all women interviewed in the villages noted that cultural practices mean that earned income is destined for family use, not personal use, although children's needs were first priority for the income which the women earned.
TSAEE	The result of both increased income amongst women participating in the project and increased cooperation amongst men and women in economic decision making appears to have improved household life and harmony amongst family members for project participants. 100% of interviewed participants (162/287; 112 female, 50 male) stated that peace in the household at the conclusion of the project is very improved. All participants, both men and women, were very clear in stating that this directly related to the increased income earning ability of women in their homes. To quote one woman in Ukerewe, "There is no longer as much pressure on our husbands to bring money in for everything. We work together more equally." This is indicative that improved income earning ability amongst women in rural households is an effective means of fostering greater equality within households.
TSAEE	Women also reported that they participate more fully in household land use planning, particularly in Misungwi where they have received family food budgeting training with their spouses. This supports the value of providing training in family food budgeting, and the role it plays in promoting gender equality. Despite significant quantitative differences in leadership amongst groups participating in the project, interviewed participants, regardless of gender, stated that they feel women are regarded more positively in their homes and communities as a result of partaking in the project.



TSAEE	When men have been informed about the overloaded responsibilities of women, they have responded by assisting with domestic work in some families or by supporting the purchase of appropriate technologies which reduce women’s time (bicycle to assist with marketing or wood/water gathering or a butter making machine). Some groups (e.g. Jogoo) have also been supportive in assisting their spouses with payment of school fees and in business development. This increased awareness is brought about through discussion and deliberations. The motivation for men to change is that they realize the benefits that the women are gaining by engaging in business activities. Also, technologies such as improved stoves facilitate time reductions in cooking and fuel collection that create greater opportunity for engagement in productive income-generating activities.
TSAEE	Training in financial management, record keeping and entrepreneurship has been a key working tool to providing a means for informing women of their rights in terms of economic equality with their male counterparts. In 5 of 11 interview sessions in Magu and Ukerewe, elected village representatives were in attendance. In post group evaluation discussions with these village leaders, 100% (5/5) indicated that they support the ongoing activities of women and youth groups in their village as the groups have provided an example to their neighbours in agriculture and life improvement. The continuation of this practice is suggested to continue throughout future TSAEE activities as it acts to demonstrate to men and women participating in the project, as well as outside public observers (village elders, etc.), the tangible benefits of equal economic participation by women.
VIETCANSOL	The project also supported women’s associations to increase household income through developing animal husbandry in 3 core villages. Women’s Associations gathered the interests of the women and expressed them to the PCA in the following ways: Every quarter Women’s Associations and PCA organized meetings with participation of women to discuss interests and problems of the women in agricultural production. On the basis of the results of meetings, PCA and Women’s Associations defined the follow-up activities to help women to develop their agricultural production. Women’s Associations in the villages received technical support from the project and helped women apply the new technology. They are interested in application of new technologies in the field, especially the new crop varieties and proper land use and land management, and in application of new technologies in animal husbandry for food security and increasing income in the households (in Vietnam the households are almost all led by men, and women are equal in deciding everything in the life of the households). Farmers expressed the desire that the support be continued in the future.
SRICANSOL	In all project sites the women were very supportive towards project activities even though they were all not directly involved. In all project sites, the wives of the male beneficiaries willingly attended project meetings, training sessions, field days, field tours etc., when their husbands could not attend. During project surveys, data collection and other information gathering missions, in the absence of the male beneficiaries, the wives were capable and willing to give all the required information regarding farming activities. This helped to keep project activities on schedule.
SRICANSOL	The gender based survey conducted in Wattappola/Panabokke, Ambanganga and Neelawala showed that women spend as much time as their husbands in farming related activities in addition to playing an equal role in family and community related activities. Most women said they were able to cope with domestic and farming activities with the help of their husbands and children.

## **2. Rights**

### **2.1 Public awareness**

#### **A. Within the SPO**

Increased awareness of gender equality led to increased participation in public events focused on women's equality such as International Women's Day. In 2006, none of the projects reported participation in IWD. By 2011, two SPOs organized Women's Day events for members to create increased awareness about women's rights. (VIETCANSOL and GSAP)

SPO members became more aware of gender equality through the results from the organizational assessments conducted in 2006-2007. By working with rural beneficiaries on issues of gender equality, SPOs become more aware of the issue and the challenges.

Examples of results from projects:

<b>Project</b>	<b>Public Awareness Results</b>
SADP	One of the members of the project coordinating committee chosen at project inception is a national gender expert and sensitized other members on gender issues in Nepal during the implementation of the project activities. She prepared the children rights section within the Social Development sector of the 3 Year Interim Plan of Nepal which is funded by UNICEF Nepal and also worked on the initial draft of Youth-sector of three year interim plan. She provided feedback on youth participation and youth involvement in development process of Nepal.
VIETCANSOL	Forty female scientists from the National Institute for Soils and Fertilizer (NISF) Branch of the Vietnam Society of Soil Science (VSSS) participated in a cultural tour and professional networking opportunity In honour of International Women's Day 2011. They travelled to Nam Dinh province, located about 80 kilometres from the institute. The GEM member was one of the organizers.
GSAP	GSAP GEM member organized a seminar for the Ladies' Club in the CSIR-Animal Research Institute to sensitize them on Gender Mainstreaming, the AWARD Fellowship, and also some leadership skills acquired from the AWARD Leadership training programmes. One speaker spoke on the Women's Day theme for 2011, one on Gender Mainstreaming and the other on Women in Leadership.

#### **B. Within the rural beneficiary population**

Increased awareness of gender equality led to increased participation in public events focused on women's equality such as International Women's Day. In 2006, none of the projects reported participation in IWD; while by 2011, two SPOs had organized events for project participants to create increased awareness about women's rights. (SRICANSOL and TSAEE)

Increased organizational and government recognition and appreciation of women as farmers and achievers of tangible goals increased awareness among other women of the opportunities to participate in agriculture for income generation/micro-business.

Gender equality training at the community level increased men’s and women’s awareness of and legal rights related to land ownership and fair division of labour.

Examples of results from projects:

<b>Project</b>	<b>Public Awareness Results</b>
GSAP	The selection of a woman by Ministry of Food and Agriculture as the best small ruminant farmer in the Sawla-Tuna-Kalba Administrative District encouraged other women to take livestock rearing seriously.
SRICANSOL	For the first time the Soil Science Society of Sri Lanka (SSSSL) organized a programme to mark the centenary of International Women's Day on March 8, 2011 at the SRICANSOL Resource Centre at the University of Peradeniya near Kandy. Thirty five farm women from the Neelawala and Wattappola sub sites of the SRICANSOL II Project, and representatives from the Executive Committee (male and female) participated.
TSAEE	Throughout the full term of the project, all groups received training from TSAEE in: <ol style="list-style-type: none"> <li>1. Leadership Training</li> <li>2. Entrepreneurship</li> <li>3. Record Keeping</li> <li>4. Financial Management</li> <li>5. HIV/AIDS Control</li> </ol> <p>This includes gender equality awareness and legal rights related to land ownership and division of labour.</p>
TSAEE	TSAEE participated and supported financially Women’s Day events, especially in 2010, in Misungwi District. Women’s group members attended the day-long event hosted at Ukiriguru.
SADP	PCC has expressed awareness of the security of land and resource rights, cultural identity and dignity for indigenous people (male and female).

### **3. Development resources and benefits**

#### **3.1 Livelihoods and productive assets**

##### **A. Within the rural beneficiary population**

All SPOs have collected GDD on rural beneficiaries in baseline reports and in end of project reporting for 2006-2011. 25% to 67% of the female population engaged in subsistence agriculture in project areas were directly engaged in the 7 projects.

Rural women had increased access to productivity-enhancing inputs provided by SPOs acting as catalysts. This included skills training, farmer field schools and workshops in beneficial management practices, improved access to bio-pesticides, seeds, irrigation technologies, seed storage, livestock production, field crop production, vegetable crop production and compost making. SPOs designed training events keeping in mind rural women’s time availability and literacy needs.

Rural women were given priority access to inputs such as seeds, livestock for breeding stock, and vaccinations for livestock with results evident in improvements in income.

Women’s increased access to follow up and extension visits provided additional skills development opportunities. Training was designed to accommodate for literacy levels and scheduling which suited women’s time.

By forming groups, women were facilitated in accessing micro-credit for enterprise development. Women increased their incomes as a result of improved production, marketing and some value-added processing. Increased income was recorded at every project, with a range of production and value-added processing undertaken, and a range of micro-credit availability.

**Issues**

Challenges to gender equality in the project include inadequate land for expansion of women’s farms, and time, labour and resources involved in watering and building fencing. This could be attributed to time poverty. SPOs began asking the question: How can we develop technologies to reduce women’s (and men’s) time involved in vegetable production activities? (GhIH)

These challenges are being addressed for instance in Babile, where one women is supported to move to a marshy area where she is digging shallow wells to water her crops. In this area she has access to one and halves acres of land instead of 75 m<sup>2</sup> that she is currently using at the dam site. At the new site, her activities have attracted the attention of at least 10 new gardeners. These new gardeners help her to dig shallow wells and build a mud fence and in exchange she trains them on Best Management Practices she learned from GhIH.

Respondents in several project countries indicated that they require more knowledge to understand weather or climate change. This highlights a training need for the next phase of the project to ensure project gains amongst participants regardless of gender. (GhIH, TSAEE)

All participants in the TSAEE project identified that larger economic gains can be made through the accessing urban markets, however 89% (144/162; 110 female, 34 male) have been unable to accomplish this task. While wider market access has been accomplished by 2 groups comprised of predominantly male memberships (2 female, 16 male), it should be recognized that this speaks to women’s limited independent access to motorized transport use. However, the near universal lack of securing independent transport can also be argued to be a limitation amongst all participants regardless of their gender. Transport planning for groups within TSAEE projects is a recommended strategy for securing wider market access amongst project participants, regardless of their gender, in future endeavours.

Specific examples of results from projects include:

<b>Project</b>	<b>Livelihoods and Productive Assets Results</b>
<b>Productivity-Enhancing Inputs (Extension, Skills Training, Access to Technology)</b>	
GhIH	At the project level, 45 % of all FFS participants were women and at least a third of all ToT participants were also women. This high percentage of women involvement in the project was made possible because women and men were equally involved in planning and scheduling the training programmes. Flexible days were selected for instance village market days on which women were very busy were largely avoided.

GhIH	Male and female respondents identified differing mechanisms for gaining skills in DSVP technologies: Male respondents identified the greater need for advice and information, particularly visits to a demonstration farm, regular visits of project officials, and expansion of the irrigable area. Female respondents identified the need for more training.
GhIH	GhIH worked directly with 105 farmers [52 women (50%) and 53 men farmer participants] in 2006-07 at four locations - Busa, Karni, Babile, Nandom- Pataal. In 2010, the total number of water users (direct and indirect farmers) at the village sites totaled 811, an increase of 50 farmers from previous years. Women totalled 506 (62 %) and men totalled 305 (38%).
GSAP	A total of 269 women were trained in vegetable farming through demonstration and farmer visits conducted by MoFA staff.
SADP	35 participants (13 females and 22 males) from different organizations took part in workshop organized on topics of organic production.
SADP	Trained 55 community members (28 male and 27 female) in organic agriculture with distribution of 8 sets (21 pages in each set) of compiled handouts material in local and simple language
SADP	Trained 44 members (from different parts of country) consisting 32 male and 12 female in organic agriculture in resource centre including HIV positive members from different parts of the country. Though the organic farming training was given to 31 (6 female and 25 male) HIV positives of different districts of Nepal to be independent in purchasing their medicines, for the Tanahu district, it needs more time duration to achieve such outcomes.
SADP	Needs assessment of 190 respondents which represents 439 community members (Darai and Kumal) consisting 225 male and 214 female was carried out
SRICANSOL	School children received training on compost making. About 50% were female students.
SRICANSOL	The Project gave equal opportunities to both male and female beneficiaries to attend training sessions, field days, field tours etc. As a result in most sites there was a marked increase in women participation.
SRICANSOL	Women beneficiaries in Neelawala, impressed by Project achievements and the successful outcomes of the Compost for Vegetables BMPs, requested a training on compost making for fellow members of their local women's group ("Nilawala" Women's Organization). The training was held on 23 September 2010 at HORDI, Gannoruwa, for 21 members of the women's organization who were either direct or indirect beneficiaries of the Project. The President, Vice-President and Treasurer of the organization also participated. The President in her address at the end of the training said she would request the Provincial government to give the Nilwala women's organization a dedicated piece of land in Neelawala which the members could cultivate using the knowledge gained by the training.
VIETCANSOL	Women and Youth farmers learned 38 technologies through training, field days, field visits and FPR, then they applied 28 of these technologies on their own farms because of their interest in technologies that related to food production, high yield and products which are easy to sell. Over the five years of the project term the number of women and youth farmers who applied new technologies also increased from 0 to 2956.
VIETCANSOL	Over the five years of the project term, the number of participating farmers in training grew from 32 (32 male, 0 female) to 5805 instances of farmer participation (2925 male, 2880 female) and in field visits and field days from 0 to 3727 instances of farmer participation (1804 male, 1923 female)

TSAEE	<p>67% of all rural village participants are female; they had increased access to group development, training and extension services. All women (67% of project participants) indicated that their access to agro-economic information was limited to 2 annual visits from government extension services. Throughout the duration of the project, all women indicated that exposure and access to agro-economic information through their relationship with TSAEE increased to a minimum of:</p> <ul style="list-style-type: none"> <li>• Weekly in Magu</li> <li>• Bi-weekly in Ukerewe</li> <li>• Bi-monthly in Misungwi</li> </ul> <p>100% of interviewed participants state that they have access to extension through TSAEE on demand through phone contact and that they are now aware of where and how to access government extension services.</p>
TSAEE	<p>All interviewed participants identified record keeping and financial management as the most valuable training they have received from TSAEE. All participants in the project (67% of whom are women) indicated that they have increased their access to income by moving from 1 stream or one crop type of agricultural income in 2006 to an average of 3 sources of agricultural income generation in 2011. As well, all female participants have increased their participation in value-added practices in basic milling, improved stoves and biofuel briquettes, baking, sewing, crafts (basket making), brick making and rosella wine production, leading to increased income, as a result of training and extension.</p>
<b>Inputs</b>	
GhIH	<p>Women farmers were given priority in the distribution of inputs especially vegetable seeds. At the village level, women are known to be sole processors and custodians of vegetable seeds, because they are able to store the seeds better.</p>
GSAP	<p>Numbers of goats and poultry kept by women increased by 50.4% and 39.4% respectively.</p>
GhIH	<p>Onions are the 2<sup>nd</sup> most popular crop grown by beneficiaries after chili pepper. Of both direct and indirect beneficiaries, 37% are growing onions, in addition to other crops. 15 direct female farmers out of a total of 56 respondents are growing onions</p>
<b>Implementation of Technologies</b>	
GhIH	<p>At Busa most of the Neem extract preparation facilitation sessions of the FFS are led by women. In Babile, onion seed production and distribution is actively facilitated by women. This has led to fairly good quality of onion seed production in Babile.</p>
GhIH	<p>Women are the majority of direct respondents who began using the DSVP technologies, as they were a focus of the project and therefore have been using them the longest. Indirect beneficiaries adopted the practices a year after the direct group began.</p>
GhIH	<p>Male respondents identified the greater need for advice and information, particularly visits to a demonstration farm, regular visits of project officials, and expansion of the irrigable area. Female respondents identified the need for more training. Farmers want training and incentives as encouragement and motivation.</p>
GhIH	<p>There appear to be gender differences in levels of importance of technologies attributed by male and female respondents. Males ranked the following higher: pricking out, composting, sterilization of nursery bed, pest and disease control, mulching, staking, simple record-keeping, and harvesting and post-harvest management. Females ranked bucket kit irrigation as being of higher importance.</p>
GSAP	<p>61.4% of women beneficiaries used improved technologies in livestock production such as the use of appropriate housing and feeding.</p> <p>20% of women adopted improved technologies in vegetable production such as use of manure to improve soil structure and fertility.</p>



GSAP	Over 60% of women used environmentally sustainable practices such as the use of livestock manure for vegetable farming.
VIETCANSOL	There were 3823 instances of women and youth farmers participating in this training to adopt 28 agricultural production technologies.
TSAEE	<p>This increase in TSAEE officer visitations amongst all groups (67% female) throughout the duration of the project has allowed all participants to receive training from TSAEE in eleven thematic areas of Beneficial Management Practices (BMPs):</p> <ol style="list-style-type: none"> <li>1. Entrepreneurship</li> <li>2. Record Keeping</li> <li>3. Financial Management</li> <li>4. Crops</li> <li>5. Livestock</li> <li>6. Poultry</li> <li>7. Crop Production (Spacing)</li> <li>8. Soil Conservation/Land Preparation (Compost, Manure, Tied Ridging)</li> <li>9. Post Harvest Technology</li> <li>10. Environmental Conservation</li> <li>11. Improved Stoves and Trees</li> </ol> <p>100% of women interviewed in evaluation exercises stated that they increased their knowledge of how to implement BMPs and this was observed in improved practices and techniques.</p> <p>Further these same respondents indicated that they have improved their production techniques, harvest management, and market timing in their individual household farms as a result of training and extension support from TSAEE.</p>
<b>Access to Credit, Income and Market Development</b>	
GhIH	In Babile, women have formed their own group and are making financial contributions that could serve to leverage access to credit. In 2010 one of such women farmers was able to secure a loan from the Northern Rural Growth programme (NRGP) and established a two acre millet farm.
GSAP	Influence of women involved in community development and decision making (in particular those stemming from the micro-credit system) continued to improve through provision of anti-snake serum to community clinics and provision of financial assistance to non-project members for farming activities of non-group members such as hiring of tractor services.
GSAP	<p>Procurement of goats from Ørskov Foundation and project funds to 85 women improved their livestock base and income generated from sales.</p> <p>Income from sale of shea nuts picked increased by 29.2%, shea nut butter by 12%, livestock and vegetables resulting from increased population growth by 50.4% and 39.4%, respectively and trading using micro-credit by 86.3% of women.</p>
GSAP	35% of project beneficiaries used shea-nut processing machines acquired as a result of project participation to cut down on drudgery. Some other groups are saving money towards procuring their own machines.
GSAP	Enhanced financial assistance provided by 12.4% of women involved in the project to non-group members for farming activities such as hiring of tractors for ploughing.
GSAP	83.9% of women beneficiaries were able to meet household needs as a result of profit made from farming, trading and sale of shea nuts and butter

SADP	Over the 18 month period of the project, 12 community members (6 female and 6 male) had the opportunity to learn new skills related to organic farming and increase their income from NRs. 1500 to NRs. 4500 per month through involvement in demonstration farm as labour.
SADP	13 (35% of total women in group) women practiced organic farming in their farm and sold crop seedlings (tomatoes and cauliflower) to local villagers and increased income and gained quality agricultural products in their own farm
TSAEE	As a result of combined practices in improved agricultural production, value addition and marketing, individual participants (67% female) in groups have been able to increase their household income from an average of 25,000 Tsh per month (\$17.85 Cdn.) in 2006 to 75,000 Tsh per month (\$53.57 Cdn.) in 2011. The use of income gains made by the projects participants were further noted to demonstrate no major gender or age related distinctions in relation to: <ul style="list-style-type: none"> <li>• Ownership of property and goods attained through either tangible goals achievements</li> <li>• Claims of ownership and access to use of group attained capital items.</li> <li>• Average monthly income amongst group members</li> </ul>
TSAEE	6 of 35 groups (60 participants; 52 female [87%], 8 male [13%]) participating in the project have incorporated stove making as a viable form of income generation in local market sales. While improved portable stove training fosters a viable means of simultaneously increasing biomass supply and reducing wood biomass consumption, noted improvements to the availability of time invested by women in fuel collection were also noted. Amongst 69 interviewed participants (female) that stated they used improved stoves in their homes, fuel collection time was reduced from an average of 3.9 hours per day to 1.15 hours per day. As both of the roles of cooking and fuel collection are considered to be the domains of women in rural Tanzanian households, benefits to time saving have allowed women engaged in the project, by their own account, greater time to invest in the agro-economic activities of their group and in raising their children. Women interviewed (69) as improved stove users also reported consistently that they felt their health was now improved from the reduced workload of carrying large amounts of firewood long distances.
TSAEE	All female participants have increased their participation in value-added practices in basic milling, improved stoves and biofuel briquettes, baking, sewing, crafts (basket making), brick making and rosella wine production, leading to increased income, as a result of training and extension.
VIETCANSOL	The project supported 160 poor women and youth who belonged to poor households in the core and satellite villages to apply new agricultural production and land management technologies to increase their household income. In the project villages, poor women and young farmers lack financial capital and knowledge. The project helped them to improve their knowledge in new technologies with the potential to increase their income, and provided opportunities and assistance in increasing household food security.
VIETCANSOL	Participating in project activities and FPR increased the capacity of women's associations in leading women's groups to apply new technologies with the aim to increase crop yield and reduce the number of poor women. The women's association in Con village organized women to carry out the spring and summer rice intensive cultivation demonstration and the spring and summer corn intensive cultivation demonstration. These technologies increased rice yield by 25-32%. The project supported women's associations to develop household income of poor women through developing animal husbandry in 3 core villages (women's associations of 3 core villages organized 75 households to develop pig and chicken husbandry and increased their household income by 25-35 %).



VIETCANSOL	The project supported women’s associations to develop household income of poor women through developing animal husbandry in 3 core villages (women’s associations of 3 core villages organized 75 households to develop pig and chicken husbandry and increased their household income by 25-35 %).
SRICANSOL	Through the project, 5 women were trained on making value added products such as jams and chutneys and thereby increased their income.
<b>Access to Land and Water</b>	
GhIH	In Nandom, the project supported allocation of additional land meant for demonstration area to women who need land to expand their gardens. GhIH also supported the construction and rehabilitations of wells that would make more water available especially to women. The project also piloted the use of Bucket Kit Irrigation which is aimed at reducing the labour involved in watering for women.
GhIH	Some projects supported allocation of additional land meant for demonstrations to women who needed land to expand their gardens. Women tended to manage smaller sized vegetable plots than men. (GhIH) and this resulted in differences in cropping selections and yield differences.  More male respondents showed a greater frequency of managing land size between 0.3 to 0.5 acre in 2010 than in 2006. Both male and female respondents showed a greater frequency of land size management between 1.2 to 1.5 acres in 2010 than in 2006. Women did not manage land over 1.5 acres in size in either 2006 or 2010. Very little differences in larger land size managed by males were observed.
TSAEE	The improved ability of women in agro-economic performance in rural communities as supported through TSAEE training initiatives has resulted in the women being assigned a high value as land users amongst their household and community counterparts. In recognizing the role of women as essential in delivering and implementing agricultural practices, 100% of interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) stated that women are <i>highly valued as land users</i> . This was visible through women’s groups being able to have ongoing access to community land for production; land acquired through village government approval or through purchase by women’s groups.

## 3.2 Institutional capacity

### A. Within the SPOs

Increased numbers of female students enrolled in specific agricultural disciplines has occurred through improved effectiveness and concerted efforts of mentorship, role modelling, financial awards, technical encouragement, support to development of student chapters, and leadership development. Increased student numbers should result in increased numbers of female professionals within the SPOs after graduation in the future.

Specific examples of results with students include:

<b>Project</b>	<b>Institutional Capacity Results</b>
GhIH	<p>The active recruitment of women has provided a strong avenue for mentoring female students at the various tertiary institutions in Ghana. The number of female student members within GhIH is directly linked to the number of female students enrolled at the Horticulture departments of the various universities. At KNUST for example, the target is 1/3 female students out of the total number of students enrolled, but this target has not been met.</p> <p>The percentage of female student members in GhIH has fluctuated from 23% in 2006, to 14% to 16% to 21% in 2009 and 2010 (or 80 actual in 2006 and 54 in 2010).</p> <p>In GhIH student chapters, 15.9 % [238M and 45F= 283] of the members are female. Younger women and student members will be mentored by senior scientists.</p>
GSAP	Mentoring of 20 female agricultural tertiary students was undertaken by senior GSAP members and enhanced future gender equality within professionals in animal agriculture.
GSAP	<p>Financial assistance provided by the project enabled 8 tertiary female students to make poster presentations at GSAP conference, thereby increasing female undergraduate participation/ attendance at scientific conferences.</p> <p>Of the 10 animal science final year undergraduate students under the GSAP mentoring programme, 8 females participated at the GSAP conference and presented posters on their dissertations</p>
GSAP	Limited financial and technical support to 10 female undergraduate student research projects encouraged interest in animal agriculture among female students in universities and planned to reduce gender disparity in the animal agriculture profession.
GSAP	Formation of GSAP tertiary Student Chapters in 3 public universities with women in leadership positions encouraged interest in animal agriculture among female students in universities.
VIETCANSOL	6 members, 3 men and 3 women, carry out soil and fertilizer research for PhD and MSc degrees. These knowledge and skills of 60 members were lacking before implementation.
SRICANSOL	The number of female students entering the Faculty of Agriculture and specializing in Soil Science increased by 30% during the past 5 years. The Project facilitated the establishment of the student chapter of SSSSL which offers equal opportunities for both male and female students to hold leadership positions and participate in society activities in general. This could be the main reason for the increase. It also indicates the increased interest shown by women towards agriculture.
ETCANSOL	<p>ESSS is working on strategies for making progress on gender equality by identifying women students in soils and natural resources management studies.</p> <p>An increased number of junior members (15%) are women students, most of these from the Hawassa node. ESSS has worked to recruit members from women currently in soils and natural resource management, particularly those working in national and regional research centers by reaching out through node coordinators at universities and to key members at national research centres.</p>

Strengthened analytical skills related to gender analysis have resulted from allocating resources and provision of training for members in several SPOs (see table below). SPOs demonstrated increased capacity to do gender analysis. In their end of project reports, GhIH collected and analyzed data in 40 tables from a gender perspective; GSAP analyzed 24 tables; VIETCANSOL analyzed 21 tables. VIETCANSOL developed criteria for identifying stakeholders and beneficiaries which included gender in all categories.

VIETCANSOL developed an organizational gender equality strategy for 2011-2020. By 2020, the organizational goals are to have women in 35% of leadership positions, 30% of women holding advanced degrees, 45% of women members participating in training programs, and 35% of total scientific research subjects and projects presided by women. TSAEE established a gender desk and recognizes the need for more than a gender statement – that a gender policy is needed. GhIH identified that challenges exist in the low number of female authors of scientific papers. GSAP identified that though some successes were achieved on gender equality over the project phase, concerted efforts would be required to improve gender equality particularly at the organizational level.

SPOs increased their effectiveness in reaching and serving female members more equitably. The increase in female membership is attributable to the intensive membership drive as well as promotion of equal participation for all the genders. The increase could be a result of direct invitation to female members who were also encouraged to present papers at AGMs, to attend meetings and conferences, and to publish in the journals. Female members were provided with increased opportunities to be trainers, to conduct research, and to write reports, thereby having increased opportunities to express women’s needs and interests within professional organizations.

Specific examples of results with SPOs and members include:

<b>Project</b>	<b>Institutional Capacity Results</b>
<b>GE Training for Members and Linkages</b>	
GSAP/GhIH	GSAP and GhIH signed a memorandum of understanding and undertook the joint activity on training on RBM and gender.
SADP	SADP conducted one day gender balance awareness training in the resource centre for the organizational members in association with “Participatory Development Centre,” an internationally renowned NGO (based at Pokhara). Ms. Deepa Gurung is a gender expert and provided advice on gender equality. Ms. Usha Pokharel, one of the project coordinators, is a gender expert and identified and discussed gender issues during the implementation of the project activities.
GSAP	Linkages were made with Women in Agricultural Development (WIAD) of MoFA, a gender organization dealing with women.
TSAEE	In 2006, TSAEE identified a Gender Project Officer (F) and disseminated knowledge on gender equality through training with the youth and adult groups related to women and wealth, labour, and decision making. A second Gender Project officer (M) was named in 2009 and a Gender Desk was formed that is comprised of these 2 TSAEE officers. The Gender Desk meets to review projects underway and identify strengths and weaknesses in programming as they impact both male and female participants. As of the present time, roles and responsibilities of the Gender Desk have not been completed in written form.
TSAEE	Gender skills training has resulted in the recognition of high capacity in the TSAEE LZCOM for the effective delivery of gender mainstreaming programs to rural communities amongst professional partnership programs with TAN-RICE, Oxfam GB.
TSAEE	TSAEE has provided equal opportunities for capacity building to all members so that they can support both rural male and female beneficiaries, but with an emphasis on providing extension support to female farmers. All curriculum/training materials for TSAEE members have been developed to include gender references.

VIETCANSOL	Improved knowledge of SFRI women (6 members) in gender issue analysis and fit in the agricultural activities through training, that was supported by MARD. Improved capacity of SFRI women staff in gender issue analysis methods, writing research proposals and papers (In 2006 SFRI women staff lack of capacity in gender issue analysis methods, writing research proposals and papers. In 2010 40% SFRI women staff could implement gender issue analysis methods and write research proposals and papers).
SRICANSOL	Circulation of the AIC “GEM of the month Newsletter” among members helped to increase their knowledge on gender related activities conducted in member countries and the world over in general.
TSAEE/GHIH/GSAP	Gender is consistently a priority of the project’s activities as is evidenced by the inclusion of capacity building efforts for wider members and partners. This includes the participation of representatives from the Ghana Institute of Horticulture (GHIH), Ghana Society of Animal Production (GSAP) TSAEE and the TPCCC making presentations on gender perspectives to 30 invited participants during a gender workshop held at Ukiriguru in South-South Exchange activities in March of 2007.
ETCANSOL	One female ESSS member is a representative on the GEM working group for AIC since 2009. GEM rep was appointed to assist the project coordinating committee in planning for gender equality results. Ethiopia has considerable experience in promoting gender issues within the Ag Research branch, information packages could easily be prepared for the future.
<b>Capacity and Skills Building</b>	
GSAP	Within GSAP membership, women scientists participated in the <i>African Women in Agricultural Research and Development (AWARD) fellowship program</i> . This “is a professional development program that strengthens the research and leadership skills of African women in agricultural science, empowering them to contribute more effectively to poverty alleviation and food security in sub-Saharan Africa.” GSAP’s capacity to address and access gender equality issues was strengthened through mentoring training programmes undertaken by three female members and one male GSAP member in Kenya and the United States of America under AWARD fellowships.
VIETCANSOL	Improved the capacity of project women members in training management, establishing work plans, writing scientific papers and FPR and activity reports, FPR planning, FPR monitoring, FPR evaluation, reporting FPR results and project activities to farmers and other stakeholders, site selection and transferring new technologies to farmers, organizing field days, field visits for farmers and local staff (5 project women members).
VIETCANSOL	Improved capacity of SFRI women in crop, soil and fertilizer research and transfer (In 2006 only 20% SFRI women scientific staff could lead scientific research subjects, but in 2010 35% SFRI women scientific staff could lead scientific research subjects).
VIETCANSOL	Owing to the improvement of the capacity of PCA women, they could guide and transfer new technologies clearly. Over the five years of the project term, PCA women guided and transferred 12 technologies to farmers and organized 120 training courses, field days, FPR to farmers.

TSAEE	This project supported professional development via distance education at Assiniboine Community College in Brandon, Manitoba, Canada in 2009-10 for one TSAEE member (female, TSAEE LZCOM Treasurer Mary Sayi) for credited study in the use of Microsoft Excel. The result of this training has been an improved use of Excel in financial reporting in the ITPP project that has been recognized by other international development agencies. In the presentation of financial reporting practices as delivered in the ITPP project, Oxfam Great Britain asked TSAEE to implement the same financial practices in reporting to their TASU – Improved Poultry project with TSAEE. This demonstrates the highly quality of skills gained by female members and the essential role TSAEE women occupy in advancing the organization to wider and credible avenues of international partnerships.
TSAEE	Capacity building training amongst TSAEE members facilitated the development of 14 female trainers as of 2011, compared to 5 female trainers which existed in 2006. The 14 trainers represent 47% of all trainers.
ETCANSOL	The organizational assessment identified the need for increasing the number of women members either as society members or members of the Executive Committee. The main focus regarding gender equity over the project period was to create awareness of gender-based issues. The membership application and renewal process in the past has not had a classification by gender, and as a number of Ethiopian names are gender-neutral, it has been difficult to establish the specific number of women members or project participants based on membership rosters or conference participant lists. ESSS plans to gather baseline data in 2011 to gather gender-disaggregated information on membership nationally and demographics at the nodes. It will then track these annually and use the information as the basis for monitoring progress as well as for establishing strategies to address shortcomings.
ETCANSOL	The goal of addressing gender equity is made difficult with the shortage of women professionals in this area of research and development. ESSS is working on strategies for making progress on gender equality under these circumstances by establishing a gender equity task team to emerge from the ongoing formulation of a strategic plan for ESSS.
ETCANSOL	The plans to enroll student members at nodes is expected to increase the proportion of women participants, since there is greater representation of women in natural resources management education than at the professional level. The plans involve recruitment through node coordinators; gender-disaggregated survey of students and teaching staff in soils and NRM; and identification of professional needs of women students and teaching staff
<b>Annual Meetings, Speakers, Journals, Lectures, Meetings</b>	
GhIH	As regards participation in the Annual General Meetings and Scientific Conferences, female attendance increased from 21% to 25% within the reporting period. The increase could be as a result of direct invitation to female members who were also encouraged to present papers.
GhIH	Journals: Females were authors in 8%, 11% and 3% of the papers in Volumes 5, 6 and 7 respectively. Females were lead authors in 4%, 3% and 0% of papers in Volumes 5, 6 and 7 respectively.
GhIH	Out of 9 speakers for the 5 national public lectures organized over the reporting period 5 were females. This represents 55.6%. Deliberate effort was made to select female competent speakers who also doubled as role models for the female members.

TSAEE	Internationally, TSAEE in the Lake Zone has participated in professional exchanges to International Partners Meetings in Edmonton in 2007 (1 female, 2 male) and Sri Lanka (1 female, 1 male) in 2009. An additional professional exchange to Canada was undertaken in 2010 to attend the Association for International Agricultural and Extension Education (AIAEE) annual conference in Saskatoon, Saskatchewan in 2010 (1 female, 1 male).
TSAEE	120 TSAEE members were in attendance at the 2011 Lake Zone AGM which included a presentation on Gender and Climate Change by a TPCCC- CARES member.
VIETCANSOL	VSSS published 42 science papers (of which 20 papers written by women) in Vietnam Soil Science Journal. These knowledge and skills of 60 members were lacking before implementation.
VIETCANSOL	Over the five years of the project term, the project organized 10 professional training courses, 4 scientific seminars and 5 professional exchanges with participation of 60 members of PCA (38 male, 22 female), and 60 members of SFRI (30 male, 30 female).
ETCANSOL	Young professionals, especially women, are encouraged to be members and participate in ESSS activities so that they can benefit in the process. This includes providing help in the preparation of presentations for the annual workshops. 10 women professionals out of 100 participants participated in the 2009 National Workshop on soil and water research management. Three women scientists presented papers at the 2009 National Workshop on soil and water research management out of 41 papers in total.
ETCANSOL	Of the 100 registrants at the 2011 AGM, five were women. Between 20 to 30 of the registrants were young members; most coming from the Hawassa and Bahir Dar nodes.
ETCANSOL	Out of 42 papers presented in the 2011 workshop, about half were on climate, watershed and agroforestry. One keynote paper (out of a total of 2) and 1 paper (out of 5 invited lead papers) in the parallel sessions were presented by women. Renowned respected speaker (e.g. Prof. Sabine Troeger - Social scientist) was invited to give one of the two the keynote addresses to the AGM, conferences, and workshops. She made a compelling presentation on the impact of climate change on a nomadic group in southern Ethiopia.
ETCANSOL	Conducted field-days at the Hawassa and Bahir Dar nodes with participation from regional agriculture research institutes, bureaus of agriculture and higher-learning institutions included 8 female participants in Hawassa and 3 in Bahir Dar. Provided T-shirts with Amharic captions, caps, field trips to degraded areas, to promote and publicize the ESSS. This activity was held twice once in Hawassa and once in Bahir Dar, and a third is being planned for Mekele. 8 women from Hawassa and 3 in Bahir Dar participated.

## **B. Within the rural beneficiary population**

SPOs increased their analytical skills and their knowledge of gender equality issues concerning rural women at project locations.

SPOs demonstrated increased capacity to do gender analysis. In their end of project reports, GhIH collected and analyzed data in 40 tables from a gender perspective; GSAP analyzed 24 tables; VIETCANSOL analyzed 21 tables.



Results in institutional capacity of SPOs to meet the needs and interests of both women and men are evidenced by increased effectiveness in reaching rural women and in improved program design and implementation.

SPOs increased their capacity to consult with women on issues and priorities relevant to agricultural endeavours. They also demonstrated increased effectiveness in reaching and serving rural women equitably.

Some examples of results include:

<b>Project</b>	<b>Institutional Capacity Results</b>
<b>Effectiveness in reaching women</b>	
VIETCANSOL	The project organized meetings with the participation of three Village associations (Farmer's Associations, Women's Associations, and Youth Associations) Through participatory group discussion and presentation, general discussion methods were used in meeting with the three Village associations (Farmer's Associations, Women's Associations, and Youth Associations) to seek views and preferences from all three groups.
GhIH	The project intends to work along the value chain whereby processing and marketing which are dominated by women would be given key emphasis. The project has already started training programmes on value chain and women have been strongly represented. The project has also linked up with food joint operators, hotels and restaurant that are mainly run by women.
GhIH	Indirect male respondents identified the most influential source of information was from other farmer volunteers. Female indirect respondents identified training workshops as an influential source of information. Both direct and indirect male respondents identified the most influential source of information was from UDS staff and other farmer volunteers. Female indirect respondents identified GhIH/UDS/MOFA as an influential source of information.
GhIH	There appear to be gender differences in the changes noted as a result of DSVP activities. More males than females noted the changes in increased food security, improved environment and rural community development. More women than men noted the change in income, employment and livelihood.
VIETCANSOL	Before the project, field activity participants in the rural mountainous regions of northern Vietnam were mostly men of the SFRI – Branch of VSSS (80-90%), because of SFRI people's habit. SFRI women worked mostly in SFRI laboratory and field sites of the plain regions, so they have low capacity and little experience in working in the rural mountainous regions of northern Vietnam. These events resulted in few female VSSS members on the coordination teams at the Tuyen Quang and Hoa Binh sites at the time of project initiation. It also needs time to change the women's habit. It is also a process. Over the five years of the project term, by helping women of the project to improve their capacity and to change their habit by training, workshops, exchange visits, field days, there were more women participating in project site coordination teams in three sites.

VIETCANSOL	<p>In project villages 65-70% of labour in agricultural production is performed by women, but women have less opportunity for training and participation in community activities. The project requested and invited mostly women farmers to participate, but in fact the arrangement of each family is different. Before the project, most of the social activities, for instance, meeting, training, village events, invited one representative of each household, and mostly men (70-80%) participated in these activities.</p> <p>Since 2006, the project encouraged more and more women farmers to participate in the training and provided opportunities for women to directly participate in training and workshops to improve the capacity of women in agricultural production and land management technologies. To identify women’s training needs, the project determined women’s training requirements through assessments carried out with the participation of women and Women’s Associations.</p>
SRICANSOL	<p>The Project has made it possible for the Society to have close links with the GEM Working Group and the GEM of the month newsletter regularly received has helped the Society to organize gender based programmes, e.g. on 8 March 2011 for the first time the Society organized a programme to celebrate International Women's Day. Thirty five farm women from 2 Project sites (Neelawala and Wattappola) and SSSSL Ex Co members (male and female) participated. The lady Consultant Psychiatrist, invited as the guest of honour, led an interesting discussion on “How to be happy”. SSSSL President and head of the Department of Soil Science, Faculty of Agriculture also addressed the gathering.</p>
SRICANSOL	<p>Most of the extension workers are female. The Project trained them on BMPs. The Project encouraged the involvement of female extension workers in field activities and they proved to be as efficient or sometimes more efficient than their male counterparts. Farmers in general are more obliging and willing to accept instructions from female extension workers probably due to their calm and gentle approach when instructing / advising on farming related matters.</p>
<b>Program Design</b>	
VIETCANSOL	<p>To help women attend training, the project organized a training course of only 1-2 days with participatory methods and using presentations with illustration photographs of field practices for all participants to easily understand, because normally in the countryside there are low levels of education (in our case, illiterate farmers), so in the case of farmers “seeing is better than hearing”.</p>
VIETCANSOL	<p>In the project villages, women’s associations wanted to guide women farmers to use corn seed from corn cultivation demonstrations for pig husbandry, and farmyard manure for further crop production, to increase household income. However, they lacked capital and knowledge of pig husbandry and farmyard manure composting. The project supported women’s associations to help women farmers to apply pig husbandry technologies to increase household income. For pig husbandry the project invited the extension staff who was responsible for pig breeding at the district and provincial level to help farmers in getting all technologies. Almost all the field work in the countryside is practiced by women, so FPR is carried out largely by women. In the total family income, animal breeding contributed about 50%. The main animal husbandries of poor households were pig and chicken. Through the women’s association project, 75 households were supported to develop pig and chicken production. Owing to this support their household income increased by 25-35%.</p>



VIETCANSOL	<p>There are extension staff in the different levels (national, provincial, district, commune, village) available to participate in project activities. It depended on the subject of activities who was invited. There is full-time extension staff, mostly staff at the village and commune levels. About 60-80% of them are women. They are the key people, together with project staff, who help farmers in implementing field practices by following crop management and crop grow in “farmer field schools” At the training workshops we invited other levels (province and district) of extension staff depending on the subject and the capacity of the extension staff. About 40-50% of the invited extension staff was women, depending on the topics of training and the capacity/high experienced staff.</p> <p>We organized meetings with participation of both men and women and we used participatory group discussion methods to seek views and opinions from both women extension staff and men extension staff.</p> <p>Over the five years of the project term the number of local extension staff participating in training increased from 358 (238 male, 120 female) to 696 (384 male, 312 female). The number of local extension staff participating in field visits and field days increased from 432 (296 male, 136 female) to 745 (388 male, 357 female). In these training, field days and field visits there were not only project village and commune extension staff participating in its, there were also district, province and other village and commune extension staff participating to learn new technologies, so percentages of female extension staff were only 45-48%.</p> <p>The project worked with Ha Tay extension agencies to organize exchange visits for 90 local extension staff (48% are women) of 3 project districts on fruit tree demonstrations on sloping land and pig husbandry demonstrations in Ha Tay province, and with the farmer association of Soc Son district, Hanoi organized exchange visits for 24 local extension staff (53% are women) on using earthworms to produce farmyard manure and keeping tortoises, chicken and pig husbandry and Thai Land jackfruit demonstrations.</p>
SRICANSOL	<p>The Project offered equal opportunities for male and female members to participate in Project activities and also hold leadership positions as members of the steering committee, site leaders, co-site leaders and as co-workers. The total membership of the Society which stood at 197 (85% males and 15% females), in 2006 i.e. at the inception of SRICANSOL II, increased to 262 (77% males and 23% females) by 2011.</p> <p>The 25% increase is mainly attributable to the many awareness programmes, workshops, progress review meetings, field days, field visits to project sites, seminars etc. organized by the team leader and site leaders. The increase in the percentage of female members during the past 5 years could be mainly attributed to the many opportunities made available to women members by the Project. For example the Project team comprises of 5 women while the steering committee has 3 women. Having seen the many opportunities available, the number of women seeking SSSSL membership has also increased as shown by the memberships granted in 2010/2011 to 7 females and 2 males.</p>
SRICANSOL	<p>Conducted gender based survey to assess the role of women in farming and community activities</p>
SRICANSOL	<p>Farmers not punctual due to social and family commitments. Female participation is higher when project activities are conducted in the morning while male participation is higher when activities are conducted in the evening. Accordingly programme schedules were adjusted to ensure maximum male and female participation.</p>

### **3.3 Policy change**

#### **A. Within the SPO**

SPOs have identified the need for gender equality policies within their organizations, and the need for government agricultural policies which support gender equality. Activities which have led to results include support through communiqués, position papers and discussion papers. SPOs are promoting awareness with subsequent changes to policy taking place.

Examples from projects include:

<b>Project</b>	<b>Policy Change Results</b>
GhIH	2009 Communiqué to the Ministry of Food and Agriculture asked for in the implementation of the programme the central and local governments should ensure gender equality in the appropriation of support.
GSAP	Presentation of 2 position papers and 2 conference communiqués to the government influenced government policies in animal agriculture such as interventions in dairy farming (training of 10 people in artificial insemination in Kenya) and the poultry industry (subsidy on fertilizer for maize and soya production) which will be of benefit to women at both organizational and community levels.
VIETCSANSOL	VSSS members at the SFRI have identified the absence of a fully developed gender equality strategy.
TSAEE	Subsequent to TSAEE undergoing a gender audit with Oxfam Great Britain, TSAEE at the Lake Zone Coordinating Office in Misungwi produced a gender statement. The gender statement declares the intention of the organization to regard gender issues within all of its activities. TSAEE identified the need to develop a formal gender policy. A Lake Zone Gender Policy would be likely to influence the adoption of a TSAEE National Gender Policy in the future discussions that are planned to be underway for the renewing of the National Constitution in 2012.

[No policy changes within the rural beneficiary population were reported as a result of this project.]

### **3.4 Well-being and basic needs**

#### **A. Within the rural beneficiary population**

[No well-being and basic needs within the SPO were reported as a result of this project. The focus was on the rural beneficiary population.]

Rural women’s participation in agricultural endeavours has increased food security; increased income has led to improved access to health services, to protective equipment, to education for their children, and to the realization of tangible goals such as improved housing and increased purchasing power. Improved literacy and numeracy are also results from participation in training events.

Examples from projects include:

<b>Project</b>	<b>Result</b>
GhIH	In Karni, women are encouraged to form their own groups to address challenges specific to their needs, for instance networking with NGO that target women and children.
GhIH	Indirect males reported increased purchasing capabilities related to household items. All groups reported increased income, particularly the direct males. Indirect groups reported increased income for education and household needs. Both direct and indirect females reported increased food security. Indirect females reported greater change to pay for health costs. ( <i>*Direct are those directly involved with the project and Indirect are those who are not directly involved but learn from the project</i> )
GSAP	Increased income generation by women, as evidenced by 82.2% by women under the microcredit scheme, increased significantly their contribution to girl child education, family nutrition and health. <ul style="list-style-type: none"> <li>• Education of children, in particular that of the girl child, improved by 87.5% because women beneficiaries were able to pay school fees of their children.</li> <li>• 93.8% families of project beneficiaries experienced improved nutrition.</li> </ul>
GSAP	61.5% improvement in health of women and children as a result of increased awareness of prevention of communicable diseases, use of protective clothing for shea nut collection and use of insecticide treated bed nets.
GSAP	Improved health of women from the prevention of snake bites and malaria resulted in 62% reduction in hospital attendance, and their active involvement in managing use of anti-snake venom improved their standing in the communities.
TSAEE	70% of rural farmer participants in 2006 were women in the Lake Zone who reported having access to 2 to 3 meals per day for 8 months or less per year. In 2011, 67% of participants are women who report having access to 2 to 3 meals per day for 12 months of the year.
TSAEE	In Misungwi, TSAEE piloted training in Family Food Budgeting amongst its 6 participating groups to ensure that both men and women equally contribute to the balanced use of harvests to provide for both household consumption and income needs.
TSAEE	Women's access to Major acquisitions over the full term of the project include the: <ul style="list-style-type: none"> <li>• completion or near completion of 69 homes (27 Magu, 20 Ukerewe, 22 Misungwi)</li> <li>• full coverage of uniform and supply costs supporting primary school education to 184 children under the age of 13 (39 Magu, 56 Ukerewe, 89 Misungwi)</li> <li>• the full payment of fees, uniform and supply costs supporting secondary school education for 115 youth over the age of 13 (45 Magu, 34 Ukerewe, 36 Misungwi).</li> </ul>

## ii Gender equality results and issues in Canada

This section of the End of Program Report for the ITPP summarizes and provides examples of gender equality program results for AIC in Canada. It is organized on the following framework:

### 1. Decision-making

#### 1.1 Capacity for public participation

- A. More supportive environment for women's participation in AIC and among male colleagues

B. Increased effectiveness to represent women's views

1.2 Representation among decision-makers

A. Proportion of women in decision-making positions

**2. Rights**

2.1 Public awareness

A. Increased awareness and support among decision makers on gender equality issues; more informed debate on the issues

B. Increased awareness and participation in advocating for gender equality

**3. Development resources and benefits**

3.1 Institutional capacity

A. Clearer institutional approaches to achieving gender equality objectives

B. Strengthened knowledge and analytic skills of gender equality issues and capacity to do gender analysis within AIC

C. Strengthened capacity and systems to collect and analyze data for gender analysis

D. Strengthening gender-sensitive indicators: Investing in capacity building

3.2 Policy change

A. Adoption of policy supporting gender equality

**1. Decision-making**

**1.1 Capacity for public participation**

**A. More supportive environment for women's participation in AIC and among male colleagues**

AIC strengthened its knowledge of female membership when it began collecting gender disaggregated data GDD on members in 2009. Individual membership was 335 in 2009, 334 in 2010, and 318 in 2011. In 2009, 16% of the membership was female. In 2010, it increased to 21% (71 F members). In 2011, female membership was 20% of overall membership (63 F members).

The organization also has 12 paid Association members, representing over 16,000 Canadians, and 6 reciprocal memberships with other professional associations. Gender of these members is not universally available.

As AIC increased the number of younger members in the organization, a shift in gender numbers became visible. In the 10% of AIC members known to be under the age of 40, 16 out of 32 members are female (50%). Contrast this with the largest known age group – that of ages 51 to 60 years, where 22 out of 85 members are female (26%). However, the large number of members of unknown age (25%) [because of self-declaration] may distort these percentages in the age ranges.

Where GDD is available for scientific societies which are AIC association members and partner organizations, the female membership ranged from 18% (e.g. the Canadian Society for Horticultural Science with 78 members in total) to 34% (e.g. the Canadian Society of Soil Science with 398 members in total).

### **Issue**

AIC's female membership by percentage is currently lower than some of the partnering scientific societies, and much lower than the percentage of female graduates in agricultural sciences in Canada, according to Statistics Canada and to research conducted by AIC on student numbers. AIC recognizes that addressing this disparity with a strategic plan on gender equality related to membership recruitment could increase the number of female members and contribute to AIC's long-term future.

### **IADP**

Since 1989, the AIC has provided voluntary opportunities for its Canadian members to work cooperatively and share expertise with partner profession organizations in developing countries through the International Agricultural Development Program (IADP). The IADP provides a valuable opportunity for AIC members to share their expertise, learn about development issues and make a significant contribution to improving food security and alleviating poverty in selected countries. The goals of the IADP were revised in 2010 and reflect a stronger gender perspective.

### **B. Increased effectiveness to represent women's views**

AIC increased its effectiveness in representing women's views by hosting two roundtable discussions of women working in science in south-western Manitoba in 2009 and 2010. A total of 25 women working professionally in agriculture/science/agri-resources participated in discussion for the purposes of exploring views of professional women working in agriculture/science from a broad cross-section of disciplines, strengthening a network of women in south-western Manitoba working in professional agriculture/science, reporting on the results of the discussion to raise awareness about gender equality in agriculture/science and creating awareness about AIC. The results of both the first and second discussions are available at the AIC website at [http://www.aic.ca/gender/pdf/Roundtable\\_Report\\_Nov\\_2009.pdf](http://www.aic.ca/gender/pdf/Roundtable_Report_Nov_2009.pdf) and [http://www.aic.ca/gender/pdf/Roundtable\\_Report\\_November\\_2010.pdf](http://www.aic.ca/gender/pdf/Roundtable_Report_November_2010.pdf). Information gathered from the discussions contributes to a proposed research study on the equality of opportunities and advancement for women working in agriculture.

### **A. Proportion of women in decision-making positions**

Decision-making representation is evidenced in the elected Board, the paid staff, and the volunteer members.

As AIC began collecting GDD on its Board in 2009, the number of women on the Board has ranged from 1 to 3 during this time. While the size of the Board varied, the percentage of women on the AIC Board ranged from 12.5% to 43%.

- At the beginning of 2010, the AIC Board was comprised of 1 female (12.5%) and 7 males.

- After the AIC annual general meeting in May 2010, the Board composition changed to 3 females (37.5%) and 5 males.
- This changed again in November 2010 to 3 females (43%) and 4 males after one male Board member resigned.
- In March 2011, the Board composition changed to 2 females (33%) and 4 males due to a resignation.

The Board of Directors Gender Equality Committee Board was formed in April 2008. It agreed to work with AIC staff on initial policy limitations and to examine the implications to AIC governance system.

With the departure of the male AIC Executive Director in 2010, staffing reverted to seven female (78%) and two male staff. Three female staff members are part-time employees ranging from 20 to 30% time. The acting executive director of AIC since early 2010 is female.

Within the international project coordinating committees (PCC) in Canada, the membership composition grew from 14 members in 2006 to 18 members in 2011, and 6 females to 8 female members (44%).

- CSSS – 4 males, 1 female
- CSHS – 3 males, 3 females
- CSA – 1 male, 1 female
- CSAS – 1 male, 1 female
- TPCCC/CARES – 1 male, 2 females

Women's increased representation is visible on three key Working Groups of AIC which were established in the 2006-2011 period of the program.

In 2006, AIC International Program staff circulated a request to Canadian and project partner groups for volunteers to sit on a Gender Equality Task Team (GETT) and confirmed eight people (five women and three men, half the group from Canada and half from partner countries, plus two staff and two Board members). The mutual trust, respect and knowledge developed through the consensual process of creating a customized definition of gender equality provided a strong basis for moving forward.

The GETT received input from the PCC members who participated in the Gender Equality Roundtable at the 2007 IPM. The IPM participants identified three key recommendations from the Institutional Assessment to focus further work of the GETT:

- produce a common *definition* of Gender Equality relevant to AIC;
- determine the *scope* of activities and programs that AIC is involved in and what it can influence; and
- define *indicators* to measure the results of what it can influence.

GETT sub-groups first worked on the definition and scope which helped in the next step – writing a draft Gender Equality Policy for AIC.

Before disbanding, the GETT completed their final task in defining the Terms of Reference for the Gender Equality Mainstreaming (GEM) Working Group. Nine members of the original GETT agreed to continue to give of their time and talents through membership in the GEM Working Group. The broader based composition of the GEM brought a comprehensive perspective to the work of mainstreaming Gender Equality within all facets of AIC.

The second key team is the Gender Equality Mainstreaming Working Group. Since 2008, gender equality mainstreaming within AIC has been guided by the GEM Working Group composed of volunteer members representing a wide cross-section of the organization.

- The 16 members of the GEM Working Group changed from 11 females (69%) and 5 males to 12 females (75%) and 4 males in May 2010 as the Board rep changed.
- The representative from the Board to the GEM changed to a newly elected female Board member after the May 2010 AGM.
- The seven individual country partners on the GEM included at least one gender equality representative/ consultant from their membership on each of the seven SPO project coordination committees. The GEM included 8 international members (75% female) of its 16 total members.

The gender equality mainstreaming process in AIC depended on an ability to constitute and maintain a strong group of dedicated members and international partners (male and female) who volunteered their time and energy to moving this issue forward.

The third key body which has increased opportunities for women to be represented in decision-making positions is the Climate Change Task Team (ACT2). In response to ever-increasing scientific predictions that half of the world's population could face climate-induced food shortages of vast proportions and within AIC's mission of broadening society's knowledge and use of science and agriculture, AIC convened a Climate Change Task Team (ACT2) in 2010 involving Canadian and overseas partners within its International Twinning Partnership Program. The membership of the ACT2 includes 3 women (23%) and 10 men. Seven of the members are based in Canada, two in Sri Lanka, one in Ethiopia, one in Vietnam, one in Nepal, and one in Ghana.

## **2. Rights**

### **2.1 Public awareness**

#### **A. Increased awareness and support among decision makers on gender equality issues; more informed debate on the issues**

In 2005, AIC's international program was evaluated by CIDA, and the recommendations were incorporated into the current five year International Twinning Partnership Program (ITPP). In preparing its current five-year program, AIC and its partner organizations proactively sought to

define and achieve one of the five ITPP objectives, “to advance the representation and voice of women as participants and beneficiaries of agricultural endeavours.”

In 2007, AIC began to examine whether the current gender profile of the profession was correspondingly reflected in its own membership, structures and programs.

In conjunction with the 2007 International Partners’ Meeting and the AIC annual conference in Edmonton, the GETT and consultants organized a Gender Equality Roundtable and invited representatives from development and agricultural organizations, and those who have worked in Gender Equality, to share insights, experiences and ideas. The Roundtable took place prior to the conference with great participation from AIC members, partners, staff, Board and invited participants. Bios of the presenters and their presentations are available by contacting [iadp@aic.ca](mailto:iadp@aic.ca).

In 2010 AIC staff and volunteers completed a case study which describes AIC’s progress on the importance of addressing gender equality across all the facets of its work, the process and methods undertaken to date, the lessons learned along the way, and the steps still needed in the future. Data was drawn from a review of AIC documents and relevant external publications, as well as interviews with key individuals. The case study also included a number of questions for study and discussion, both for those involved with AIC and for other organizations who wish to learn from AIC’s experiences. The case study was circulated to all AIC members.

The Economic Growth and Environmental Sustainability Directorate of the Canadian Partnership Branch of the Canadian International Development Agency invited AIC to make a lunch presentation about the Gender Equality Case Study. In June 2010 AIC staff made a presentation about AIC’s recently completed Case Study on Gender Equality Mainstreaming to 25 CIDA employees, consultants and international development NGO representatives at CIDA’s office in Gatineau, Quebec. A key area of questioning after the presentation included the discussion of whether gender equality mainstreaming is a business case or a human right. AIC was congratulated by other Canadian NGOs on being proactive in using a structured approach in its scope of influence to examine gender equality mainstreaming.

## **B. Increased awareness and participation in advocating for gender equality**

AIC has expanded its communication methods in increasing awareness amongst members and organizational decision-makers about gender equality mainstreaming. In 2009, AIC added a Gender Equality button to its home page website, with links to background information, resources, and the AIC gender equality policy.

AIC increased its awareness of gender equality through posting a monthly news digest produced by members of the GEM Working Group of AIC. The GEM gathers information and articles on an ongoing basis on gender equality mainstreaming within agriculture, scientific research, rural development, climate change and organizations and compiles it into a monthly news digest. Information is shared with members, partners, scientific societies and member organizations. The views and opinions presented are not necessarily representative of AIC, but represent trends,



issues, news, and opinion pieces. Refer to Gender Equality Resources at <http://www.aic.ca/gender/resources.cfm> for past issues.

A second evidence of increasing awareness about gender equality is a monthly news article related to gender, often with references to international project work which is prepared by AIC staff and which is included in each AIC Monthly Report and distributed to AIC members. Examples of topics include:

- December 2010: Hot Mama's: Perspectives on Gender and Climate Change in Cancun [http://www.aic.ca/gender/pdf/Gender\\_and\\_Climate\\_Cancun.pdf](http://www.aic.ca/gender/pdf/Gender_and_Climate_Cancun.pdf)
- April 2010: Soil Science Society of Sri Lanka Demonstrates Gender Equality
- March 2010: Best Practices from our International Partners, Fifteen Years after Beijing [http://www.aic.ca/gender/pdf/Roundtable\\_Report\\_November\\_2010.pdf](http://www.aic.ca/gender/pdf/Roundtable_Report_November_2010.pdf)
- February 2010: The Women in Agronomy, Crops, Soils, and Environmental Sciences (WACSES) Committee of the American Society of Agronomy - Crop Science Society of America - Soil Science Society of America (ASA-CSSA-SSSA).

A third evidence of increasing awareness about gender equality is a collection of presentations available on gender equality which members can access. This includes:

- AIC's Case Study on GE Mainstreaming (CIDA Brown Bag Lunch on June 2010)
- Agriculture, Food Security and Gender Equality (Concordia University students on August 2010)
- Gender and Climate Change (October 2010)
- Leading Trends in Gender and Science (SJC October 2010 meeting)
- GE report to AIC's AGM (July 2011)

A fourth area in which AIC has strived to increase public awareness about gender in agricultural science is the Sustainable Futures semi-annual magazine focusing on innovation in agricultural science and sustainable agricultural practices. It is funded through advertising revenues. After the first issue was published in the spring of 2010, AIC received feedback from members about the limited perceptions of gender equality within the publication.

The Sustainable Futures Editorial Advisory Committee was formed in June 2010 to assist in identifying subject matter (innovations in agriculture and science that can help address societal challenges) appropriate for the magazine, assist in identifying authors, review submitted articles, and to provide advice and recommendations on magazine policy including audience, distribution, and advertising content. One GEM member volunteered to be the GEM representative on the Sustainable Futures Editorial Advisory Committee. Staff members have been assisting the committee to identify editorial guidelines for mainstreaming GE and have developed a draft set of monitoring guidelines related to gender equality. These were finalized early in 2011 and have been applied to issues produced since.

### **3. Development resources and benefits**

#### **3.1 Institutional capacity**

##### **A. Clearer institutional approaches to achieving gender equality objectives**

AIC conducted an institutional assessment of gender equality in 2006 through the contract services of gender consultants. The report made the following seven recommendations for AIC to enact.

1. Develop a shared understanding of gender equality, particularly as it applies to AIC's mandate and work.
2. Define a scope for addressing gender equality in AIC's work and organizational structure.
3. Undertake a survey to better identify the membership (and non-membership) base along lines of gender (including age, experience, educational background, work focus, regional background, needs, priorities, and constraints).
4. In line with Recommendation 3, it would be useful to undertake a survey on academic and workforce trends disaggregated along gender (including age, regional background, educational background, ethnicity, etc.) and other relevant lines.
5. As part of the process towards the development of an organizational strategy on gender equality, it is important to raise the awareness of, and develop the capacity to mainstream, gender equality – both in terms of institutional and programming aspects of AIC's work.
6. In line with Recommendation 5 is the need to address the aspect of the development of gender-sensitive indicators and data collection, both at the institutional and development levels.
7. Explore the possibility of an internship program to promote the talents and skills of young agrologists (men and women) both in Canada and overseas.

In 2007, AIC began to examine whether the current gender profile of the profession was correspondingly reflected in its own membership, structures and programs.

AIC took key steps to ensure that responsibility for meeting gender equality objectives rests at the highest governance level in the organization. AIC's Board of Directors has a gender equality committee and a Board member sits on the GEM. The Board passed a Limitations Policy and placed the responsibility for reporting achieving gender equality objectives in the hands of the CEO. In conjunction with establishing Board responsibility, the CEO approved an operational policy in May 2009 which outlines the objectives and strategy for mainstreaming gender equality in AIC.

In practice, a decision was taken in mid-2009 to integrate the gender equality process into the new organizational Strategic Planning Framework as a key strategy for institutionalizing gender equality objectives. The CEO delegated the task to the international program staff who in turn work with the GEM to lead and undertake the activities.

The gender equality mainstreaming process was undertaken during a time of organizational change in AIC and the Canadian agriculture sector more broadly. During this period, AIC maintained gender equality as a key organizational priority.

A transition task team was formed in November 2010 to guide AIC through a period of visioning for the future. The task team includes representatives of scientific societies and professional organizations, individual members and provincial institutes of agrology; membership is growing and as of December 2010, it included 4 women and 11 men. The focus of the task team includes (1) Board structure and governance, (2) Influencing the setting and promotion of agricultural research priorities, (3) People, (4) Profile of AIC and its members, (5) Serving the needs of agrologists and the provincial institutes of agrology.

The Gender Equality Policy is one operational policy guiding the work of this task team which is forming recommendations to the Board, which will be reviewed by AIC members at the 2011 AGM.

**Issue**

The GETT developed outcomes outlined in a draft AIC Results-Based Management (RBM) planning sheet. Due to the focus of AIC’s Board and CEO on developing a new strategic plan for the organization, there has not yet been an opportunity to present the planning sheet to the Board for review and approval

**B. Strengthened knowledge and analytic skills of gender equality issues and capacity to do gender analysis within AIC**

The progress on achieving the results of the recommendation of the institutional analysis have been monitored and shared with AIC Board and members on an annual basis since 2009.

The GETT identified areas where AIC had a high, medium and low scope of influence, and AIC has acted on these to mainstream gender equality within the organization. The scope of influence chart helped AIC better understand the activity and program areas where the organization has high, medium and low scope of influence in relation to gender equality, as a basis to develop a range of appropriate strategies for facilitating change in these different areas. This continues to form the framework for deciding how to allocate resources towards gender equality mainstreaming, what to examine with a gender lens, and how to approach it.

Recommendation from 2006 Institutional Assessment	Progress as of Dec. 2010	Next Steps 2011 and beyond
1. Shared understanding of gender equality	ongoing	Maintain GE orientations for new Board members, new committees and their members, and support awareness for membership at large
2. Define a scope	<i>High scope of influence activities examined and monitored to date:</i> Honours & Awards  Review of bylaws and policies	<i>High Scope of influence activities to be examined:</i> vision, governance, Board, membership. Staffing examined annually.

Recommendation from 2006 Institutional Assessment	Progress as of Dec. 2010	Next Steps 2011 and beyond
	<p>with a gender lens were presented to the AIC Board as section 14 Policy in Aug 2007. Staffing examined annually. Membership data available annually since 2010.</p> <p><i>Medium scope of influence activities examined and monitored to date:</i> scientific journals, Sustainable Futures magazine</p> <p><i>Organizational Structure</i> Ongoing through task teams</p>	<p><i>Medium Scope of influence activities to be examined:</i> the International Twinning Partnership Program, the Accreditation Program, conferences and discussion papers</p> <p><i>Low Scope:</i> Develop a policy and procedure to determine levels of participation.</p> <p>Speaking at another organization’s conference, implementing service contracts for other organizations, sponsoring an event, or reviewing/editing a publication for another organization.</p> <p>As the type of activities change, continue to examine the scope of influence relating to the GE Policy.</p>
<p>3. Undertake a survey to better identify the membership</p>	<p>Members’ survey conducted in 2008. Demographic data collected on annual membership renewal forms began in 2009.</p>	<p>Continue to analyze membership data to develop strategy. Measure gender balance of participation in Board, Committees and activities.</p>
<p>4. Conduct a survey on academic and workforce trends disaggregated along gender</p>	<p>See Item below in this report.</p>	
<p>5. Develop the capacity to mainstream gender equality</p>	<p><i>Institutional:</i> Part-time gender officer hired on contract under international program activities to support mainstreaming (509 hours in 2010)</p> <p><i>Programming:</i> see report items below</p>	
<p>6. Development of gender-sensitive indicators and data collection</p>	<p>Ongoing for ITPP, Honours &amp; Awards, SJC, SF magazine</p>	<p>Ongoing monitoring by staff and evaluation by Board</p>
<p>7. Explore the possibility of an internship program</p>	<p>No activity as yet</p>	<p>Determine potential areas (work, programs, and activities) for internships. Identify potential appropriate internship programs offered. Develop a timeline for initiating an internship program.</p>

As part of the mainstreaming effort, the GETT and now the GEM undertook a serious initiative to better understand the need for developing Gender Sensitive Indicators (GSIs) against which to monitor change.

Increased institutional capacity is reflected in the volunteer and staff commitments in the GEM and the IADP.

## **GEM**

The GEM Working Group (discussed in 1.2 above) demonstrated strengthened knowledge and analytic skills of gender equality issues and capacity to do gender analysis within AIC. The GEM provided guidance to AIC on the following in 2010:

- AIC's Gender Equality case study
- Gender Equality Strategic plan in response to the case study
- Individual members of the GEM provided guidance to international partner organizations on the gender equality crosscutting theme of their proposals to AIC for inclusion as part of AIC's proposal, Scientific Societies in International Partnerships for Agriculture and Rural Development (SSIPARD), which it submitted to the Partnerships with Canadians Branch (PWCB) of the Canadian International Development Agency.
- AIC's Climate Change Task Team (ACT2)
- Sustainable Futures magazine
- Input on news through the GEM Digest

In 2010, GEM members (both Canadian and International) reported a total of \$26,755 of in-kind contributions. At \$70/hour, this is approximately 382 hours, or at \$500/day it would be 53.5 days.

## **Staff**

Since April 2009, AIC maintained a position for a part-time gender equality program officer at 25% staff time. This agrologist coordinates GEM Working Group strategies and AIC GE action plans in Canada, assists with proposal development and provides support on GE to individual country partners. IADP staff incorporated gender equality mainstreaming into their data collection and analytical processes.

## **C. Strengthened capacity and systems to collect and analyze data for gender analysis**

In working towards achieving its goals, the IADP of AIC coordinates the International Twinning Partnership Program (ITPP). Results related to strengthened capacity and systems to collect and analyze data for gender analysis include the following:

- Individual project coordinators and GE reps from each of the seven (Southern Partner Organizations (SPOs) monitored gender equality results against established quantitative and qualitative indicators in the Logic Model and reported every six months to AIC's International Program staff, who in turn reported results from a global project perspective to CIDA's PWCB.
- AIC's International Project Coordinator visited each project at least twice in the five-year cycle accompanied by CPO members to confirm reported results.

- Each participating SPO conducted a gender equality review of one other SPO's proposal in preparation for AIC's PWCB 2011 proposal to CIDA; this provided each SPO an opportunity to build capacity in gender analysis.

Results for the 2006-2011 ITPP projects related to gender equality mainstreaming included the following in 2010:

- Narrative and Results Based Management (RBM) reports from all seven international projects were reviewed by AIC international program staff semi-annually from a gender equality perspective and feedback is provided to project partners to support them in mainstreaming gender equality within project endeavours.
- All ITPP coordinators assigned organizational members to perform an analysis of gender equality for the end of project reports completed in April 2011.
- All seven ITPP partners named a representative to the GEM. The newest project in Nepal identified a member immediately upon signing the three party letter of agreement in January 2010.
- AIC staff members stressed the need for GE mainstreaming within international projects with any new partnerships.

Partner organizations demonstrated their strengthened capacity and systems to collect data and conduct a gender analysis in preparation for the 2011 PWCB project proposal to CIDA. This included:

- A comprehensive GE analysis section in AIC's new proposal guidelines for project partners to use in preparing their new proposals for CIDA's Partnerships with Canadians Branch (PWCB) for AIC's September 2010 deadline.
- All seven project partner groups incorporated gender equality as a cross-cutting theme in their project proposals which were received in September 2010.
- Proposals were reviewed by AIC's international program coordinators in Canada and staff at a June 2010 workshop, and by overseas coordinators through e-mail. Comments and best practices on gender equality were compiled and distributed to ITPP coordinators as a GE Handbook for reference.
- Gender equality was incorporated as a cross-cutting theme in the Scientific Societies in International Partnerships for Agriculture and Rural Development (SSIPARD) proposal to CIDA for the March 2011 deadline.

### **Case Study**

Objectives for a case study of AIC's Gender Equality Mainstreaming process were developed in September 2009 and two gender consultants developed the case study with input from staff and volunteers. The final version of the case study was completed in March 2010.

This case study explored AIC's awakening to the importance of addressing gender equality across all the facets of its work, the process and methods undertaken to date, the lessons learned along

the way, and the steps still needed in the future. Data was drawn from a review of AIC documents and relevant external publications, as well as interviews with key individuals. The case study also included a number of questions for study and discussion, both for those involved with AIC and for other organizations who wish to learn from AIC's experiences.

Lessons learned about gender equality mainstreaming as explained in the case study include:

#### **D. Strengthening gender-sensitive indicators: Investing in capacity building:**

##### **Honours & Awards**

In 2007, the AIC Gender Equality Task Team (GETT) developed a scope of influence chart to help AIC better understand the areas where they have high, medium and low scope of influence to make changes in relation to gender equality. Knowing the amount of influence AIC has in an area is helpful when developing appropriate strategies for facilitating change. It was determined that AIC has a high scope of influence over its honours and awards. In the process of mainstreaming, AIC initiated a workshop in 2009 to increase the awareness, knowledge and skills of support the Honours and Awards Committee.

Two revised awards and one new award were announced in October 2009 after being examined with a gender lens and to make them relevant and current. Guidelines, nominations and criteria were established through a joint process with Honours & Awards Committee members and GEM Working Group members. The Sustainable Futures Award was given to Dr. Chris Cutler (male) <http://www.aic.ca/about/cutler.cfm> in 2010. The other two awards – Fellow of AIC and International Recognition – were not awarded in 2010 because no nominations were received. The 2011 awards include International Recognition award to a Tanzanian female and to the CSHS-GhIH partnership, and the FAIC award to a Canadian male. The Sustainable Futures Award was not awarded in 2011 because no nominations were received.

Unexpected results included: (i) Lessons learned from the process transferred into other areas of members' work and (ii) increased transparency of processes when reviewed with a gender lens, as in the case of the Honours & Awards Committee

##### **The Scientific Journals Committee**

It was determined that AIC has a medium scope of influence over the production of scientific journals because they are produced in partnership with the scientific societies – the Canadian Society of Animal Science, the Canadian Society of Soil Science, the Canadian Society of Agronomy, the Canadian Society for Horticultural Science, and the Canadian Weed Science Society.

In continuing AIC's focus on mainstreaming gender equality, the Scientific Journals Committee was contacted in 2009. At that time, a sub-committee of the SJC, the SJC Gender Equality Task Team (GETT), was formed to address gender equality mainstreaming with 3 males and 3 females.

The committee discussed the rationale for conducting a gender analysis of activities and programs and the positive side discussions and discoveries that occur which help to address and improve other aspects as well. Using the statistics from the Canadian faculties of agriculture (see following section), AIC noted several questions with respect to gender. The links between gender

disaggregated data of MSc and PhD graduates and research paper submissions were also looked at. Using the statistics from the faculty of agriculture group, AIC gave the example of what the data was showing and the questions it raised.

SJC had data for 2008 about where submissions come from – Canada, US and outside of North America. They also identified several federal departments, provincial bodies and universities where research is conducted.

In February 2010, staff identified potential queries for the new online manuscript submission database. However, it was later discovered that the system cannot be queried in this way. A question about gender identification was subsequently rejected by the SJC due to their belief that authors want to be gender neutral to reviewers.

AIC IADP staff attended the SJC meeting in Ottawa on October 22, 2010 to continue the discussions and presented information on science and gender equality trends. The report on progress was circulated to the SJC by outgoing Chair in December 2010 and circulated to the AIC Board for review in early 2011. Reports will be updated and reviewed annually. Information will be shared with the SJC and the AIC Board. Support on gender equality mainstreaming will be made available to the SJC upon request.

### **Enrolment Data**

In September 2009, AIC examined enrolments by gender in diploma, undergraduate, graduate and post graduate programs of agriculture at nine Canadian academic institutions. We requested recent (2008-09) enrolment figures by program and gender and for four years previous (2005-06), and summarized the responses in January 2010. We noted the dramatic difference in numbers of women between enrolments in bachelor's programs when compared to Master's and doctoral programs in agriculture. We are interested to know why this decrease occurs and what actions from the agri-resource sector would impact the potential number of female scientists graduating and subsequently working in Canada.

While we did not obtain data from all organizations or data that totals the Statistics Canada report on *University enrolment*<sup>1</sup> for agriculture, natural resources and conservation studies, we obtained preliminary data that identified trends of female enrolment in agriculture.

### **Issue**

AIC contacted the Deans who supplied the data and the Canadian Faculties of Agriculture and Veterinary Medicine [http://www.cfavm.ca/index\\_e.htm](http://www.cfavm.ca/index_e.htm) with a report of the results. AIC requested their interest in a partnership to explore the study of the current status and roles of women or gender balance in agri-resource sciences in Canada, including academia and the professional workforce. We defined agri-resource sciences to encompass not just food production, but also human and animal health, bio-products, environment and others.

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<sup>1</sup> Statistics Canada report of July 13, 2009 on University enrolment <http://www.statcan.gc.ca/daily-quotidien/090713/dq090713a-eng.htm>



The AIC Acting Executive Director and International Program Coordinator attended a meeting with the Deans of Canadian Faculties of Agriculture and Veterinary Medicine on April 2010 to discuss AIC's interest in the topic of female enrollments in agricultural science.

The deans are focused on resolving problems of decreasing enrolment and budgets and do not have the resources to take an active lead in a research project.

In January 2010, AIC put out a call to women's studies/gender studies faculties and departments at Canadian universities to identify partners interested in working on a research project to study the current status and roles of women or gender balance in agri-resource sciences in Canada, including academia and the professional workforce.

A phone meeting was held in April 2010 with the individuals who expressed interest, including expertise in economics, statistics, agricultural economics, women's studies, and business administration related to gender and organizations.

The next steps recommended were a literature review, a concept paper to define the issue, indicating how the information would be used with government, universities, industry, AIC and scientific societies, and to explore funding possibilities.

The Board of AIC will decide on how the information would be used to allocate resources towards continuing this project outside of the international program funding after it has determined the focus for AIC's programs and activities to increase and involve the membership.

### **Gender and Climate Change**

At a workshop for Canadian ACT2 members held in October 2010 in Winnipeg, members participated in an examination of climate change from a gender perspective at one of the sessions. A PowerPoint presentation is available on request.

## **3.2 Policy change**

### **A. Adoption of policy supporting gender equality**

Over the past two decades, the AIC International Twinning Partnership Program (ITPP) has included an objective to reflect the role of women within its endeavours. This was a responsive inclusion based on CIDA's gender equality in development programming policies.

In the preliminary stages of preparing its current five-year proposal, AIC and its programming partners took a proactive step forward in defining one of the five ITPP objectives as "to advance the representation and voice of women as participants and beneficiaries of agricultural endeavours". This objective supported both the global Millennium Development Goals of the United Nations and CIDA's goals for Gender Equality at both the institutional level and at the development level.

Within the program proposal, AIC further defined a plan in stating that “during the course of this proposal, at an organizational level, AIC will undertake an institutional analysis to advance gender awareness within its structures, personnel and policy frameworks. The process will be one that will engage partner organizations, both in Canada and internationally, and AIC members, Board and staff.” Leading by example, AIC committed itself to work on Gender Equality in its own administration, governance, activities and programs, and became a leader amongst organizations in doing so.

In 2006, AIC International Program staff circulated a request to Canadian and project partner groups for volunteers to sit on a Gender Equality Task Team (GETT) and confirmed eight people (five women and three men, half the group from Canada and half from partner countries, plus two staff and two Board members).

The first task of the GETT was to assist in developing an RFP to provide AIC with professional support in conducting an institutional analysis, and in organizing and facilitating a Roundtable and workshop on Gender Equality. Two consultants with strong professional backgrounds in Gender Equality and with knowledge and experience in the agricultural sector were engaged. AIC hired two gender equality consultants and underwent an institutional gender assessment in 2007.

When delivering the recommendations, the consultants stressed that gender mainstreaming is a long-term commitment and suggested that AIC should review the recommendations, reflect on the implications of each one, and commit to what is feasible and meaningful in the short-term and in the long-term. The full report of the Institutional Assessment can be obtained by contacting [iadp@aic.ca](mailto:iadp@aic.ca).

GETT sub-groups first worked on the definition and scope which helped in the next step – writing a draft Gender Equality Policy for AIC. The Board of Directors Gender Equality Committee (i.e. the AIC Board Members on the GETT) was formed in April 2008. It agreed to work with AIC staff on initial policy limitations and to examine the implications to AIC’s governance system.

When developing the Gender Equality Policy, the GETT began with a vision and what it means in practical terms.

#### *AIC’s Gender Equality Vision –*

- Males and females have equal conditions for realizing their full human rights and potential to contribute to the development of the organization and its programs, and to benefit from the results.
- AIC is recognized more broadly (i.e. beyond Board, staff, committees) as a leader in Gender Equality.

#### *In practical terms, this means –*

- Gender Equality is clearly reflected in the structures, budgets, and policies of AIC.
- Program choices and decisions of Board, staff, committees are guided by AIC’s vision for gender equality as outlined in the gender policy and will act as evidence of its implementation.

- AIC ensures Gender Equality is considered in partnership decisions. Gender Equality is an integral part of partnership choices.

In August 2008, the AIC Gender Equality Policy, as developed by a gender equality task team of AIC members, was presented to AIC's Board of Directors, who then developed and passed an Executive Limitations policy in December 2008. The Gender Equality Policy became an Operational policy when approved by the CEO in May 2009, setting a strong foundation for institutionalizing gender equality throughout AIC.

#### *AIC's Gender Equality Policy -*

The GEM Working Group will lead and undertake activities that result in the adoption and integration of the AIC Gender Equality policy. The goal of the policy is: "That males and females have equal conditions for realizing their full human rights and potential to contribute to the development of AIC and its programs, and to benefit from the results."

#### **Objectives**

1. To strengthen the capacity of AIC's Board of Directors to promote and implement the Gender Equality policy through increased awareness and understanding of the benefits and advantages of mainstreaming Gender Equality in AIC.
2. To ensure that AIC's structures (Board of Directors, members, committees and staff) budgetary and policy frameworks support its vision of Gender Equality.
3. To ensure that the programmatic choices AIC makes support its vision of Gender Equality.
4. To ensure that the partnership choices AIC makes support its vision of Gender Equality.
5. To ensure that the success of AIC Gender Equality work is conveyed to others in the contemporary agricultural community.

#### **Scope / Jurisdiction**

1. The GEM Working Group will report activity, progress, and results and make recommendations to the CEO of AIC through the AIC staff member assigned to work with the Working Group.
2. The Working Group will address gender mainstreaming at three levels: the Organizational, the Program and the Results.
  - The Organizational level includes the aspects that guide and govern how things are done – structure, practice, process and policy.
  - The Program level puts the policy and process into action and includes management, consultation, monitoring, analysis and reporting.
  - The Results level measures the results and reports on them and includes determining baseline information and measuring results. Gender Sensitive Indicators will be used to help measure the results of the activities at both the organizational level and the program level and the Scope of Influence document will be referenced to determine the level of results that can be expected.

### **Guidance from the Board / Lead Group**

As the governing body of AIC, the Board of Directors is vested with the overall accountability and responsibility for the implementation, monitoring and evaluation of this policy.

NOTE: The AIC Board of Directors has created a Board Gender Equality Committee to oversee responsibilities related to Gender Equality.

The CEO will ensure that decision making within AIC is done with reference to any policy or strategy adopted by the Board regarding Gender Equality and its definition, scope, policy and strategy.

The AIC Board of Directors will decide on key measurable indicators, request regular reports on Gender Equality and review them on a semi-annual basis to ensure the organization is achieving progress.

### **Resources and Budget**

Resources are limited to the International Program budget to support Gender Equality and will cover conference calls, some consultant support and some travel expenses.

### **Governance**

The Working Group will operate primarily by consensus except when consensus is not possible at which point it will use majority vote to determine decisions.

### **Relationships to other committees**

The Working Group will operate under the principles, definition and vision outlined in the Gender Equality Policy and strive for the objectives described in the policy.

The Working Group will receive overall direction from the AIC Board of Directors through the AIC Gender Equality committee.

The Working Group will work in collaboration with other committees to identify and undertake activities to reach Gender Equality targets and indicators.

At a time deemed appropriate by the GEM Working Group, the concept of Equality will be expanded to ensure that AIC is inclusive for all by incorporating diversity objectives into its mandate.

### **Reporting to the organization**

The AIC staff person on the Working Group will coordinate activities, is responsible for communication, and will report to the AIC CEO. The CEO will report to the Board of Directors.

The policy is available online at <http://www.aic.ca/gender/policy.cfm>.

## **G. Assessment of Environmental Results**

AIC recognizes that sustainable human relationships with the environment are fundamental to successful endeavours in agriculture. This is strongly addressed in the AIC's organizational vision "to ensure that Canadian agriculture is a global leader in stewardship of our land through science" and as a core value, it informs all decisions and programming initiatives of AIC, including the ITPP.

AIC's Mission to "broaden society's knowledge and use of science and agriculture" is further focused to utilize rational and investigative scientific processes to achieve effective and responsible use of environmental resources in sustainable and productive agricultural land use practices. Individual members (including ITPP project coordinating committee members in Canada) and association members (including CPOs) support this mission and vision.

In expanding the success and reach of Canadian agricultural science to benefit society, AIC has, since 1989, provided voluntary opportunities for its Canadian members to work cooperatively and share expertise with partner professional organizations in developing countries through the International Agricultural Development Program (IADP). The mission of the IADP encompasses key goals that all members are required to recognize and adopt in their participation in AIC's International Twinning Partnership Program (ITPP).

The primary goal of the IADP mission is to "Support and strengthen partner institutions so they can be more effective in increasing food production, alleviating poverty and improving the environment". The core of AIC's work is premised on sustainability: environmental sustainability to support agricultural production, human health and biodiversity, and economic sustainability of agricultural production to improve income.

All seven of the ITPP projects had as their main organizing principle, the appropriateness of agricultural production in relation to the environment and moving from environmental soundness to economic linkages and growth. The ITPP included objectives of increased food security and food access for poor communities and vulnerable groups through the implementation of environmentally and economically sustainable agricultural practices. Within its projects, the ITPP put into practice its assembled knowledge of the direct connections between the condition of natural resources, land management, productivity, livelihoods and poverty alleviation in rural communities.

Expertise within ITPP projects identified and appropriately addressed existing and potential environmental conditions, impacts, constraints, and opportunities related to ground and surface water (quality and quantity), soil fertility and structure, biodiversity, natural resource access, weather and climate. Project partners used benchmark data and results to assess, select and manage appropriate project locations and monitored results to ensure the immediate local containment and remediation of any negative consequences and the wider promotion of beneficial agro-environmental practices through responsive programming.

Southern partners researched, monitored and reported on soil and water qualities, erosion, salinity, land use hazards, biodiversity and agricultural practices through field and participatory methods. Canadian volunteer members assisted their partners with recommendations based on relevant professional experience and current research. AIC monitored environmental impacts through reviewing project reports, and verified conditions during project monitoring trips.

Given the influence of economic and environmental conditions on basic food security in developing nations, increasing attention to the realities of climate change was necessary in addressing challenges that have the potential to reduce the capacity of the ITPP's key stakeholders – subsistence farmers themselves, both male and female.

Within AIC, CPOs and SPOs there is a wealth of scientific skills and knowledge in the domain of climate change. AIC drew on this expertise in developing its approach to integrating effective program responses to climate change. In response to an international call for volunteers interested in participating on an AIC Climate Change Task Team (ACT2), a skilled and committed group of professionals was assembled in 2009 to guide program endeavours.

The goal of ACT2 is to ensure that AIC and project partners build the knowledge and expertise to include appropriate and sustainable responses to climate change in program and project plans. Composed of volunteer members, the mandate of ACT2 is to:

- bring current, credible knowledge, skills, insight and a global perspective to the ITPP and its project partners
- make and maintain global contacts with others working on climate change
- promote networking and knowledge sharing within the ITPP projects on climate change adaptation and mitigation
- provide assistance to projects on aspects of projects related to climate change (identifying results and measurable indicators; developing methodology for participatory research; connecting with organizations that can provide knowledge or assistance)
- provide ITPP project partners and program staff with advice, guidance and insight to incorporate climate change into the 2011-2016 proposal to CIDA.
- determine the appropriateness and viability of steps to broaden AIC's work on climate change.

The objectives of ACT2 are:

1. To strengthen the capacity of AIC and its partners to understand climate change and to respond with appropriate program and project plans to adapt to or mitigate against climate change.
2. To determine if climate change is adequately addressed within existing AIC policies, and, if not to determine AIC support for an organizational policy specific to climate change.

## **Scope / Jurisdiction**

The ACT2 addresses adaptation to and mitigation against climate change at the project level with a strong focus on results. Focusing on “results” means determining baseline information of project and program actions and what it supports, measuring the results and reporting on them. The ACT2 assisted projects to identify appropriate measurable results and methods to track them.

A session at the June 2010 gathering of Canadian Coordinators looked more closely at what the ACT2 could do to support the ITPP in addressing some of the very challenging and immediate issues. Reliable and accessible information for project partners was highlighted as an important area. Under the guidance of the ACT2, country specific resource handbooks for each participating ITPP country were produced. Information includes the use of introductory principles in climate change, current and climate change projected crop calendars, projected climate impacts and appropriate responses in sustainable agriculture, introductory participatory adaptation tools, and links to country specific reports of firmest scientific and organizational standing. All handbooks were reviewed amongst ITPP partners to ensure the validity of the information. Wider dissemination of the handbooks resulted in the use of the Tanzania Handbook by Oxfam Great Britain in Tanzania. (Copy in appendices)

On October 16, World Food Day 2010, ACT2 convened a working meeting of Canadian partners in Winnipeg, Manitoba to review project activities through an environmental lens. The meeting tapped the expertise of ACT 2 professionals to reconcile and effectively address climate change challenges impacting rural beneficiaries with sensitivities to gender based disparities in agriculture. A full review of all international activities enabled the group to begin to focus on environmental management systems that would enhance positive impacts and mitigate negative impacts, to select future project activity and to develop implementation, management and monitoring processes that will form the basis of an Impact and Environmental Management System for future projects and programs.

Recognizing that the ITPP operates within a dynamic range of landscapes and global regions from Africa to South East Asia, the ACT2 brought focus to the sustained efforts to confront challenges in productive land use, and drew readily on the program’s most valuable resource – the indigenous knowledge of rural beneficiaries within ITPP projects. Subsistence farmers played a critical role in providing key insights to the expression of climate change at local scales along with their knowledge of the native crops that are naturally resilient to conditions of drought, flood and climatic variability.

As noted, the ITPP considered soil quality, topography, geology, land use hazards, water quality and quantity, and weather and climate conditions that are integrated and advanced to stakeholders through participatory practices and demonstrations for site-specific skills and technology adoption that include:

Environmental Focus & Activities	ITPP Project Partner						
	GSAP	GhIH	ETCANSOL	TSAEE	SRICANSOL	VSSS	SADP
<b>Livestock &amp; Animal Husbandry</b>							
Goat and Sheep Breeding	x						
Improved Poultry and/or Guinea Fowl	x	x		x		x	x
Forage Legumes	x						x
Goat Milk Production and Processing	x						
Dairy Cows	x						x
Hog Production	x					x	
<b>Water Management and Efficiency</b>							
Drip Irrigation		x		x			
Water Use Planning (Water Users Assoc GhIH)		x		x			x
Irrigation and Drainage Maintenance & Management Training		x	x	x	x	x	x
<b>Soil Fertility and Structure</b>							
Manure Use and Management	x	x		x	x	x	x
Mulches (Green Manure and Cover Cropping)	x	x		x	x	x	x
Composting		x	x	x	x	x	x
Desalinization			x		x		
Fertilization and Fertility Management		x	x	x	x	x	x
<b>Pest and Disease Management</b>							
Botanical Pest and Disease Control	x	x		x	x		x
Proper Agro Chemical Use & Storage		x		x	x	x	
Microbial Inoculants						x	x
Input Reduction ( Fertilizer & Pesticides)		x	x	x	x	x	x
Nursery Bed Sterilization		x					x
Seed Treatment		x				x	
<b>Sustainable Energy &amp; Life Improvement</b>							
Reforestation/Afforestation		x	x	x	x	x	x
Improved Stoves, Biomass Efficiency			x	x			x
<b>Crop Husbandry</b>							
Crop Scheduling and Rotations		x	x	x	x	x	x
Intercropping		x		x	x	x	x
Improved Spacing		x		x	x	x	x
Improved Seed and Variety Selection	x	x		x	x	x	x
Indigenous Crop Species Selection	x		x		x		x
Staking & Pruning of Vegetable Crops		x		x	x	x	x



Environmental Focus & Activities	ITPP Project Partner						
	GSAP	GhIH	ETCANSOL	TSAEE	SRICANSOL	VSSS	SADP
Crop Establishment		x	x	x	x		
<b>Land Husbandry</b>	<b>GSAP</b>	<b>GhIH</b>	<b>ETCANSOL</b>	<b>TSAEE</b>	<b>SRICANSOL</b>	<b>VSSS</b>	<b>SADP</b>
Contour Cropping			x	x	x	x	x
Tied Ridging			x	x	x		
Terracing			x		x	x	x
Vulnerability Mapping	x	x	x		x		
Live Fencing (Shrubs, Ornamentals)		x					
Raised/Sunken Beds		x			x	x	x
<b>Associated Physical Structures</b>	<b>GSAP</b>	<b>GhIH</b>	<b>ETCANSOL</b>	<b>TSAEE</b>	<b>SRICANSOL</b>	<b>VSSS</b>	<b>SADP</b>
Small Ruminant Shelters (1x2 m)	x				x	x	x
Livestock Fencing	x	x					
Modern Home Construction Training				x			
<b>Associated Water and Irrigation Structures</b>	<b>GSAP</b>	<b>GhIH</b>	<b>ETCANSOL</b>	<b>TSAEE</b>	<b>SRICANSOL</b>	<b>VSSS</b>	<b>SADP</b>
Rain Harvesting (Surface Retention, Dugouts)	x	x					x
Shallow Well Construction	x		x				x

Individual ITPP projects achieved different levels of results that will have a positive environmental effect. With rural beneficiaries the effects are seen quickly within the local environment, with partner organizations the skills and expertise gained will improve reporting, analysis and recommendations to support a healthy environment and at the broader level increased education and awareness of decision makers and scientifically based recommendations to policy makers will have regional and national impacts.

## 1. Rural Beneficiaries

### A. *Increased awareness of environmental degradation and Beneficial Management Practices (BMPs) which will mitigate environmental damage and promote a healthier environment.*

Over the five year period, the number of farmers who learned the BMP on composting from training workshops increased from 5% to 59%. In addition, farmers who learned composting BMP from fellow farmers increased from 12 to 30%. GhIH produced radio broadcasts which included information on the preparation and use of compost. As a result of GhIH training workshops and information, the use of compost in vegetable gardens in project communities was at 98% in April 2011. (GhIH)

Participating communities increased from 4 in 2006 to 7 in 2011. Over 400 direct farmers received training through the project, representing 53% of all farmers at the sites. More than 150 of these trained farmers are now facilitating the training of others. (GhIH)

Farmers learned the use of neem extract, soil sterilization and mulching through GhIH training workshops and from volunteer farmers trained by GhIH, further reducing the use of inorganic inputs. (GhIH)

Groups are educated in best practices in crops and animal husbandry to avoid land degradation. Practices such as soil and water conservation, use of organic manure, agro forestry, integrated pest management and clean energy technologies were included in the training. (TSAEE)

Skills training delivered by TSAEE in BMPs that support improved production and environmental sustainability and adopted by participants included:

- Improved poultry and/or fowl residue incorporation
- Drip irrigation
- Water use planning
- Irrigation and drainage maintenance and management
- Manure use and management
- Composting
- Fertilization and fertility management
- Botanical pest and disease control
- Proper agro chemical use and storage
- Reforestation/Afforestation
- Improved stoves, biomass efficiency
- Crop scheduling and rotations
- Improved spacing (maize and paddy)
- Intercropping (trees/maize, legumes/maize)
- Improved seed and variety selection
- Staking and pruning of vegetable crops
- Crop establishment
- Contour cropping
- Tied ridging
- Terracing (TSAEE)

NISF provided 4,440 training materials on crop and vegetable cultivation, animal husbandry technologies, and farmyard composting to farmers in project villages. (NISF/VSSS)

Over the five years of the project term, the number of participating farmers in training grew from 32 (32M, 0F) to 5805 instances of farmer participation (2925M, 2880F) and in field visits and field days from 0 to 3727 (1804M, 1923F). (NISF/VSSS)

### ***B. Increased adoption of BMPs by agricultural producers.***

Project communities saw a reduction in the use of synthetic chemicals to control pests and diseases. 89% of farmers who participated in training, field schools and field visits have successfully implemented composting and 32% attribute yield increment to composting. 91% of direct farmers successfully implemented neem extract technology and 41% attribute cost reduction to savings on pesticides. (GHIH)

Continuous re-enforcing of the under growth of shea trees with forage legumes and intensive fodder production reduced preferential grazing of specific indigenous species which are at risk of extinction, thereby enhancing biodiversity. (GSAP)

Since the beginning of the project, communities recorded about 60% reduction in the incidence of bush fires. (GSAP)

Introduction of livestock rearing to vegetable farmers provided manure to improve soil structure and fertility while introduction of vegetable farming to livestock farmers improved feed availability for livestock. (GSAP-GhIH)

56% of farmers reduced their use of inorganic fertilizers by more than half of what they used in 2006. (GhIH)

During the five years of the project, farmers applied learned BMPs of:

- Pricking out (82.7%)
- Fertilization (94.0%)
- Composting (87.3%)
- Mulching (90.6%)
- Staking (68.0%)
- Sterilization of nursery beds (50%)
- Seed treatment (43.3%)
- Simple record keeping (51.3%)
- Pest and diseases control (88.7%)
- Harvesting and post-harvest management (50.7%)
- Grading and quality control (60%)
- Bucket kit irrigation (83.3%) (GhIH)

The good response of the sheep, goats and chickens to the inclusion of sheanut cake in diets ensured longer housing of animals leading to higher collection of manure for crop fertilization. (GSAP)

Over 60% of women used environmentally sustainable practices, such as the use of livestock manure for vegetable farming, appropriate housing and feeding of livestock. (GSAP)

Reinforcing the under-growth of the shea trees with forage legumes and intensive fodder production reduced the preferential grazing of specific indigenous forage species which are at risk of extinction and thereby enhanced biodiversity. (GSAP)

All members of the women's groups have adopted improved livestock production practices and their livestock are more productive. (GSAP)

With the support of the District Soil and Watershed Conservation agency, tree saplings were distributed to the Kumal community and planted as recommended by SADP (Nepal)

Adoption rates for BMPs in specific cropping systems were as follow:

- 100% for application of N, P and K fertilizer based on target yield in rice-rice cropping system
- 40% for application of ZnSO<sub>4</sub> to overcome Zn deficiency
- 25% for application of organic manure (rice straw, green manure and cattle manure)
- 25% for use of disc plough for land preparation (low due to limited availability of implements)
- 100% application of soil amendments (charcoaled paddy husk) in rice-rice cropping system

- <10% land preparation in rice-rice cropping system to correspond with onset of rains to save water
- 30% for cleaning of drainage canal in rice-rice cropping system depending on availability of funds
- >95% for introduction of new high yielding adaptable rice varieties
- 80-100% in vegetable cropping system, <10% in rice-rice system for preparation of compost
- <20% for use of recommended nutrient management package in vegetable cropping system. (SSSSL)

Farmer awareness of BMPs introduced in the fruit spice system was more than 90% and eight of the 15 introduced practices were accepted. 45-65% of farmers adopted four of the introduced practices. (SSSSL)

Erosion mitigation techniques are being employed and agroforestry is increasing in acceptance and use. (TSAEE)

All surveyed reported that they employ the practices of their group on their personal farm sites. A total of 509 acres of agricultural land is under production practices with BMPs on both group and individual farms. (TSAEE)

Ten of the 35 groups also adapted agro-forestry into their group activities. 2,455 trees were planted through TSAEE training in nursery development and seedling establishment. (TSAEE)

TSAEE has further integrated agro-forestry practices with improved portable stove training to foster a viable means of jointly increasing biomass supply while simultaneously reducing wood biomass consumption. Women interviewed as improved stove users also reported consistently that they felt their health was improved from the reduced workload of carrying large amounts of firewood long distances. (TSAEE)

Practices developed by groups in adapting to extreme variations in weather and climate included:

- Land selection to higher elevation (flooding)
- Delay sales of excess until rain arrival to ensure sufficient household food needs are met (drought)
- Residue incorporation to maintain soil moisture and reduce surface erosion, and shifting horticultural planting dates to rainy season rather than dry offseason production (unpredictable rainfall)
- Crop selection to short season varieties and maize, and drought resistant crop selection in cassava, sweet potato and sorghum. (TSAEE)

20 households have reduced soil erosion on sloping land by planting acacia hedgerows. (NISF/VSSS)

Applying cultivation and balanced fertilizer application on sloping land and paddy land resulted in reduced soil erosion and improved soil fertility. (NISF/VSSS)

Through farmers' interest groups and volunteer farmers' help, the number of applied new agriculture production and land management technologies in project villages increased from 0 to 36. The number of participating and benefiting farmers in FPR increased from 0 to 1152 farmers

with 3874 instances of farmer participation (1979M, 1895F). The number of farmers who applied new technologies on their own farms increased from 0 to 1925. (NISF/VSSS)

After 5 years, applying cultivation and balanced fertilizer application technologies on sloping land and paddy land, the result was reduced soil erosion on sloping land and improved soil fertility and moisture on sloping land and paddy land (increased pH, organic matter, available P and K, CEC and an increase of 6-15% in soil moisture content). (NISF/VSSS)

On lands that were largely degraded and limited in agricultural productivity, by applying innovative land and crop management BMPs, using composted local organics and agricultural production technologies to improve soil fertility and crop yield, farmers have increased the value of their land through sustainable land management. (NISF/VSSS)

Participating farmers adopted sustainable practices such as planting acacia with hedge rows to reduce soil erosion and increased farmyard composting (from 25 farmers in 2006 to 275 in 2011). (NISF/VSSS)

## **2. Partner Organizations**

### ***A. Increased skill and ability of members to conduct analysis and make recommendations.***

In 2009 the ESSS organized a national workshop on Soil Science and Water Management, “*Improved Natural resource Management for Food Security, Poverty Reduction and Sustainable Development*” to encourage a strategy for developing a coordinated and effective national program to assess and disseminate research in soils and water management and develop a practical natural resource management technical transfer program to end users. Proceedings from the workshop were published and had an immediate sell out of copies. (ESSS)

In 2010 ESSS organized and hosted an extension focused workshop to identify the extension need for soil and resource information and the need for packaging and delivery of the information for farm level use. It examined the potentially competing demands of food security and natural resources degradation and the importance of establishing entry points with the extension system. (ESSS)

In 2011 ESSS organized a workshop on “*Natural Resource Management for Climate Change Adaptation*” which contributed to establishing consolidated information base to assist in mitigating effects of climate change and to develop a road map for adapting to climate change and sustainable economic development. (ESSS)

ESSS members increased their capability and confidence in the use of analytical software particularly in the area of considering climate as a natural resource and its practical linkage with soil management. This was particularly evident in the quality and number of papers addressing issues of climate, watershed and agroforestry presented at the 2011 workshop. (ESSS)

ESSS identified a need for ESSS to contribute to positive resolutions to fertilizer management, and the introduction of conservation agriculture, such as minimum/zero tillage and crop residue management including opportunities and methods for composting. (ESSS)

Data on soil fertility constraints and crop management practices was collected for 8 sub-sites in the following and the key constraints were identified including, Poor land preparation, Low organic fertilizer usage, Improper crop and variety selection, Improper fertilizer, herbicide and insecticide application, Poor soil management, Poor crop establishment and management, Poor irrigation practices, Accumulation of P, K, Ca, Mg and Na, Pollution in surface water, and Lack of pruning and training of perennial crops. Based on the data, soil maps depicting soil related constraints of different cropping/farming systems and inappropriate agricultural practices were prepared. (SSSSL)

SSSSL AGMs featured themes with high relevancy (e.g., 2007 “Landslides and better land management to prevent them; 2008 “Water in Agriculture”; 2009 “Heavy Metal Contamination of Agricultural Soils in Sri Lanka”) reinforced by site visits for the participants. (SSSSL)

SSSSL members increased their knowledge about problems in each study area and the effect of applied BMPs by attending workshops and field programs. Each year, progress review workshops were held. The SSSSL membership comprised of profession soil scientists holding positions at different levels in government departments, research institutes and the private sector attended the workshops and field visits. On average about 60-70 SSSSL members participated of which approximately one third were women. The participation, suggestions, views and comments increased skills and helped site leaders to improve their programs. (SSSSL)

The project identified cropping/farming systems that are fragile and develop potential mitigation options which were sustainable. (SSSSL)

SSSSL member presented a paper at a conference organized by the Geoinformatic Society of Sri Lanka on heavy metal content in Girithale irrigation scheme. (SSSSL)

Through discussion of beneficial management practices for both mitigation and adaptation to climate change, TSAEE members were able to analyze sustainability from environmental, social and economic perspectives and determine which methods to test and advance with groups. (TSAEE)

### **3. Regional and National Beneficiaries**

#### ***A. Increased awareness of environmental degradation, geographic specific concerns and scientifically proven solutions.***

The success of a BMP on the integration of ginger and turmeric for spice based forest garden systems was telecast through a weekly 15 minute program “Sengayuna Kahawanu”, for island-wide dissemination of the technology. (SSSSL)

Environmental protection and conservation campaigns are ongoing within project areas. (TSAEE)

Massive campaigns were conducted for planting trees and avoiding use of marginal lands for cultivation and livestock production. (TSAEE)

A structured digital soil management database was developed for statistical analysis using GIS technology (e.g. thematic maps of soil nutrient status, environmental and social parameters). These maps have been used by site leaders to highlight problems (e.g. zinc deficiencies common in all rice growing areas) and justify the selection of BMPs for that site (e.g. recommended dose of Zn fertilizer and organic compost). (SSSSL)

### ***B. Action taken to inform and influence policies to protect the environment.***

The output documents from the ESSS workshops formed the basis for developing new agronomic recommendations and strategies for climate change mitigation, as well as providing the potential for connecting with emerging opportunities, e.g. Ethiopia's Growth and Transformation Plan and the Climate Resilient Green Economy initiative. (ESSS)

Through participation in ESSS workshops, policy makers have shown interest in natural resources conservation and enhancement. (ESSS)

Linkage between ESSS and the Sustainable Land Management (SLM) Platform helped ESSS to collaborate with key stakeholders in piloting natural resource management technologies at selected communities or watershed levels. (SLM is hosted by the Ministry of Agriculture aimed at a watershed based intervention for scaling up existing natural resource management technologies, as well as carbon accounting for climate mitigation.) (ESSS)

In its Strategic Plan 2011-2020, ESSS committed to strengthening its capacity to take a leading role in assisting the government in establishing a sustainable land use policy. (ESSS)

GhIH submitted a communiqué after every AGM to relevant government agencies outlining issues concerning the development of the horticultural industry and with remedies to address concerns. (GhIH)

Government officials, in particular from the Ministry of Food and Agriculture (MoFA), have attended GhIH AGMs and delivered key note addresses. (GhIH)

Latest research and advancements in horticulture are now published regularly in the GhIH Journal of Horticulture which is distributed to government officials, academics, researchers, producers and others in the public sector. (GhIH)

Each year, GhIH has presented National lectures on topics including: Cultivation of *Artemisia annua* and its use as a tea to treat malaria; The importance of Moringa; Better health through the consumption of hygienically produced and handled fruits and vegetables. (In 2010/11, the lectures were presented by 2 women). (GhIH)

Eight GSAP members, including 2 women, headed government institutions: Animal Research Institute; Faculties of Agriculture, University of Winnega, UDS, University of Science and

Technology, Kumasi; and Millennium Challenge Account, Agriculture Sector. Two members served on the national Poultry Development Board and four as heads of Animal Science Departments of the state owned universities. (GSAP)

Two position papers on beef and dairy production and feedlot systems were developed during workshops organized by GSAP and presented to government. Some new government policies in animal agriculture such as interventions in dairy farming (training in artificial insemination) and the poultry industry (subsidy on fertilizer for maize and soya production) were based on recommendations from GSAP. (GSAP)

Participation in the GhIH-led initiative on formation of the Agricultural Institute of Ghana with a GSAP member as the chair will see stronger collaboration amongst organizations and greater capacity to contribute to and influence government policy. (GhIH and GSAP)

SRICANSOL II developed a “systems” approach to implementing project activities: strategically identified all agencies and brought together soil scientists, water engineers, health professionals, academics and social scientists to address common issues of land use, productivity, health and nutrition (poverty and hunger) for many rural poor farmers in some of the major agricultural cropping systems in Sri Lanka. Significant in-kind support was leveraged from other agencies and institutes. The concept, approach and methodology were widely accepted as a model for future endeavours in soils and water conservation actions. (SSSSL)

Presentations were made to high level policy makers on the project activities and the effect of BMPs to increase productivity of crops and improve quality of the environment. These included annual presentations to Disciplinary working group meetings of the DoA, articles on project activities, outcomes and achievements presented in the annual Administration Report of the DoA; presentation of project findings to the District Agriculture Committee in Kandy (this is the highest policy-making decision body at the district level where all policy makers, extension officers, research scientists and others are present). (SSSSL)

With the signing of an MoU with the Department of Agriculture, a national structured digital soil management database was set up at the Natural Resource Management Centre which will manage and sustain it. This soil and BMP data base was developed by SSSSL for statistical analysis using GIS technology. Maps from on the digital database have been used by site leaders to highlight problems (e.g. zinc deficiencies common in all rice growing areas) and justify the selection of BMPs for that site (e.g. recommended dose of Zn fertilizer and organic compost). (SSSSL)

In 2009, TSAEE was invited by the Minister of Agriculture to prepare a strategy paper on improving agriculture in the Lake Zone. The report was presented in 2010. (TSAEE)

TSAEE participated in and contributed to local and regional agricultural planning: National and District planning for agricultural sector in Singida (Central Zone); annual regional planning sessions in Tabora (Western Zone); District agricultural development planning on Misungwi, Ukerewe, and Magu (Lake Zone). TSAEE is recognized by NGOs, local and regional Tanzanian government as an organization that effectively improves lives in rural communities. (TSAEE)



Eight members of NISF participated on the Scientific Committee of the MARD to establish and revise mechanisms on fertilizer and agricultural land management and to support farmers to apply new technologies in agricultural production. Their participation contributed to decision-making that will help determine the direction in development of agriculture in Vietnam, particularly in poor, northern regions with hilly farmland. (NISF/VSSS)

**H. Goods purchased for the Program and information on their disposal**

A complete listing of goods purchased by project for implementation of the 2006-2011 ITPP is provided as Appendix 4.

**I. Intellectual property rights subject-matters created under the Agreement**

There were no intellectual property rights subject-matters created under this Agreement.

**J. Public engagement activities and how these activities contributed to public awareness and understanding of international development issues**

The ITPP public engagement goals supported recognition of Canada’s role in international development. The overall goal of public engagement in the ITPP was to coordinate initiatives which increase awareness and understanding of international development in agriculture with the public engagement goals differing slightly with each constituent group. Within the ITPP budget, the allocation in dollar figures for programming in Canada was not high; however, in practice the activity level was robust and reached

thousands of Canadians on an annual basis. This was made possible largely through the voluntary contributions of our Canadian program partners Public Engagement within the International Twinning Partnership Program focused on the following key Canadians:

1. Individual and organizational members of AIC
2. Scientific societies/partner organizations and their members
3. Community organizations and their members

**Goals for each Constituent Group**

<b>Group</b>	<b>Goals</b>
1. Individual and organizational members of AIC	<ul style="list-style-type: none"> <li>• to increase awareness of the contributions of AIC partner organizations to international development</li> <li>• to promote opportunities in scientific learning and skill development in international development</li> </ul>
2. Scientific societies/partner organizations	<ul style="list-style-type: none"> <li>• to apply professional science in context-specific settings</li> <li>• to promote innovations in agriculture which improve household food security and alleviate poverty</li> </ul>
3. Community organizations	<ul style="list-style-type: none"> <li>• to create awareness about the need for innovations in agriculture, improved household food security and the alleviation of poverty in project countries</li> </ul>

The activities which contributed to public awareness and understanding of international development issues also varied with each group.

**1. Individual and organizational members of AIC**

In 2010, AIC had 334 individual members (21% female) plus 12 paid Association members representing over 16,000 Canadians, and 6 reciprocal memberships with other professional associations. Key public engagement activities included developing and updating program information for AIC’s website and information sheets, poster presentations at AIC conferences, monthly reports and newsletters, developing a case study on gender equality and publishing climate change information bulletins.

An indicator of increased understanding of international development issues by this group was evidenced by ongoing support for AIC to continue with the international twinning partnership program. This was expressed by the Board’s approval to submit a new proposal to CIDA in March 2011.

Results include:

- Increased networking amongst AIC and Canadian organizations involved with international development in Canada and overseas
  - Indicators of this are noted in the table below
- Increased awareness of gender equality mainstreaming through the development of and participation in an AIC working group
  - An indicator of this is the contributions of information made by working group members to a monthly digest on topics related to global issues of gender equality mainstreaming which is posted to the AIC website
- Increased awareness of global climate change through the development of and participation in an AIC working group

An overview of activities:

<b>Description of activities</b>	<b>Explanation of how activities contributed to public awareness and understanding of international development issues</b>
1. The International Program section of the AIC website was updated to reflect the new ITPP in 2006.	Web hits measured for the period of April 2010 to April 2011 show 65,364 page views or 6.11% for the International Program page of AIC. Information about individual projects was accessed 20,487 times during that same period. The Gender Equality page was accessed 25,264 times. On a pro-rated basis, if the International page was accessed at the same rate between 2006 and 2010 as 2010 to 2011, we can estimate 300,000 page views between 2006 and 2011 for all three constituent groups and others.
2. Fact sheets were prepared on each of the projects.	Distributed at AIC conferences and SS conferences, to other NGOs, government agencies and the general public.
3. A special International Program afternoon occurred at the 2007 AIC Conference (November/07) with all projects presenting poster displays.	Conference delegates were informed about the new project funded by CIDA, location of project sites and goals. Increased networking occurred as the Ghana Deputy High Commissioner to Canada and a delegation from the Ghana

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
	Union of Manitoba attended the Awards Luncheon in recognition of Dr. Oppong-Anane, coordinator of the GSAP project, who was presented with the 2006 AIC International Partner's Award.
4. All projects were represented through poster presentations at AIC's Annual Conference in Edmonton in November 2007.	150 conference delegates were provided an overview of project sites and goals and a progress report about the new project funded by CIDA.
5. A report on the February 2007 professional exchange between CSHS and GhIH was included in the AIC Newsletter	Distributed to over 600 members of AIC.
6. Highlights from the ITPP were featured in articles carried in AIC's Monthly Reports (April, May, July/August, September, November 2007; January and March 2008, regularly in 2009, 2010, and 2011).	The Monthly Report is distributed directly to all AIC individual (400), association (19) and corporate (3) members and is posted on the AIC website ( <i>note</i> – association and corporate members represent several thousand individuals within their own memberships).
7. Development Roundtable on Gender Equality held during the IPM in Edmonton Nov. 2007	Participants at the Roundtable included IPM Canadian and International delegates, AIC staff and Board members, CIDA Project Adviser (Ottawa), CIDA Regional Director (Alberta), and representatives from other NGOs. The Roundtable included presenters from different organizations outlining their experiences addressing gender – this included both development and institutional perspectives
8. Two articles were written by VIETCANSOL (CLMPAV) Canadian coordinators describing the soils exchange with members of the SRICANSOL II project. The articles were posted on the AIC website and also distributed across Canada via the AIC newsletter.	These articles provided a description of the tours to various project sites and the meetings held with farmers and their families, village and commune leaders and provincial extension specialists to discuss the project results and the FPR approach adopted in VIETCANSOL.
9. A library of gender equality resources was established on the AIC website in 2009, as well as the introduction of a resource section on climate change. The <i>GEM Digest</i> , produced monthly, started in 2010. The <i>Digest</i> presents a calendar of events,	Cross-cutting themes of gender equality and environment receive greater attention by members and the public. Contributions of global GEM members have increased. Introduction of a new resource section on

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
opportunities, and a selection of current articles. All resources are publicly accessible.	gender and climate change.

## 2. Scientific societies/partner organizations

The five project partner organizations between 2006 and 2011 were the following, with 2010 membership numbers in brackets:

- a) Canadian Society of Soil Science (398)
- b) Canadian Society of Animal Science (324)
- c) Canadian Society of Agronomy (201)
- d) Canadian Society of Horticultural Science (78)
- e) Canadian Agricultural and Rural Extension Society (22)

In total this represents 1023 individuals from partner organizations who have been engaged in international development issues related to agricultural science and extension.

Results include:

- Increased publication of project results in organizational communication tools
- Increased awareness of international agricultural development through presentations at scientific conferences and poster sessions
- Increased awareness of gender equality through participation in monitoring and reporting, presentations and ongoing communications on gender equality and gender issues.

Indicators of increased understanding of international development issues include:

- The value of in-kind donations contributed by partner organizations to ongoing implementation, monitoring, reporting and evaluation of project activities
- Opportunities for overseas members to conduct scientific research in Canada
- Liaison and collaboration in co-publishing and potential project spinoffs

An overview of activities:

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
1. <i>Canadian Society of Animal Science</i> – Article published on the <i>Integrated Crop and Livestock Production in Northern Ghana</i> project in Society Newsletter and on the CSAS website in 2006	Annual articles distributed to 390 members. All members had the opportunity to increase their awareness. Web site is open to the public for viewing.

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
2. <i>Canadian Society for Horticultural Science</i> – 5 articles published on <i>Strengthening the Impact of Horticulture on Social Development in Ghana</i> project in society newsletter in 2006, 2007, 2008, 2009 and 2010.	Distributed to over 120 members each time.
3. In February 2007, representatives of the Canadian project teams from CSAS and CSHS met to discuss the south-south exchange and the increased collaboration between the two projects in Ghana.	Increased networking on professional issues related to international development in Ghana.
4. <i>Canadian Coordinating Committee for TSAEE</i> – Project information distributed to former CSE members in 2006.	Former CSE members were informed about ongoing relationship with TSAEE.
5. <i>Canadian Society for Soil Science (CSSS)</i> – Liaison with the editor of a special publication on Canada-Vietnam connections with a chapter dedicated to the ITPP project in 2007 and 2008. With input from the Vietnamese coordinator, the Canadian coordinator wrote a chapter in the book entitled “Vietnam-Canada: Friendship Beyond Borders” which was sponsored by the Ambassador of the Socialist Republic of Vietnam of Canada.	Information distributed more widely – in Canada, in Vietnam and globally.
6. <i>Canadian Society for Soil Science (CSSS)</i> Article published on the twinning project in the CSSS newsletter in 2007	Informed over 400 CSSS members of the ITPP project.
7. Presentation on the Integrated Crop and Livestock Production in Northern Ghana project to members of the Canadian Society of Animal Science in 2007	60+ members of CSAS increased their understanding of food security issues and beneficial management practices in Upper West of Ghana.
8. <i>Canadian Society for Horticultural Science</i> – Committee member gave a project update presentation at the CSHS Annual Meeting in Saskatoon in June 2007.	25+ members of CSHS increased their understanding of food security issues and beneficial management practices in Upper West of Ghana.
9. <i>Canadian Society of Animal Science</i> coordinator presented an overview of the project to the 2008 Annual General Meeting of CSAS and also prepared a mail-out on the project to all CSAS members.	Article distributed to 390 members. All members had the opportunity to increase their awareness.
10. Volunteer project coordinators from the	Members of CSHS increased their

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
<p>Canadian Society for Horticultural Science prepared project updates for the November 2008 and February 2009 CSHS Newsletters, gave a poster presentation on the project to the <i>Plant and Soils 08</i> Conference, as well as presenting a project report on behalf of the management committee to the Conference.</p>	<p>understanding of food security issues and beneficial management practices in Upper West of Ghana. 600 participants had the opportunity to view the poster.</p>
<p>11. Canadian Society of Soil Science coordinator for SRICANSOL II distributed a request for text book donations to all members of the Canadian Society of Soil Science in 2008</p>	<p>Received dozens of books for the student chapter of SSSSL. Both SRICANSOL II Canadian coordinators delivered the books, at no cost to the project, during project monitoring visits.</p>
<p>12. Presentation delivered to the joint Green-Sys/Canadian Society of Horticultural Science Annual Business Meeting which included a discussion of continued participation in a subsequent phase of the GhIH/CSHS Dry Season Vegetable Project in 2009.</p>	<p>20 who heard the presentation</p>
<p>13. Dr. Shannon Scott (Canadian co-coordinator of the GSAP-CSAS project) presented a report on the integrated crop and livestock project to the Canadian Society of Animal Science at their July 2010 annual general meeting.</p>	<p>approximately 50 members were updated</p>
<p>14. Dr. Karen Beauchemin, a scientist at AAFC Lethbridge, donated and shipped all back issues of her subscription of Animal Science journals to GSAP for the use of scientists in Ghana. The total value of this donation was in excess of \$10,000; including shipping, it was in excess of \$14,000. In December 2010, Dr. Beauchemin again donated approximately \$40,000 to KNUST to set up a scholarship for female students pursuing graduate studies in agriculture or environmental sustainability. The amount represented the monetary value of a prestigious award she received from the Swedish Royal</p>	<p>These presentations created awareness and a feeling of ownership of project among CSAS members and executive councils.</p>

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
Academy.	
15. Invited presentations and information sessions were made to the Manitoba Institute of Agronomy and the Manitoba Society of Soil Science during their respective annual meetings in 2008 and 2007	50 members (20%F) for the soil science meeting, and 90 members (25%F) for the MIA who heard the presentation each year.
16. A-H. Abubakari, K.G. Mahunu, P. Kumah, I.A. Idun, M.R. McDonald, D. Ceplis, M. Pritchard, J. Owen. 2010. Poster presentation: <i>Radio broadcast as an extension tool in dry season vegetable production in the Upper West Region, Ghana</i> . Association for International Agricultural and Extension Education. Saskatoon, May 16-19, 2010. Presented by Dr. Mary Ruth McDonald.	The poster received the third place award for outstanding poster presentation. 120 international delegates in attendance.
17. M.R. McDonald, A.-H. Abubakari, J. Baah, P. Kumah, I.A. Idun, Mr. G. Mahunu, K. Oppong-Anane, M. Pritchard, and S.L. Scott. 2010. Poster presentation: <i>Horticulture and animal production improve farm income and address gender equality in Northern Ghana</i> . Association for International Agricultural and Extension Education. Saskatoon, May 16-19, 2010. Presented by Dr. Mary Ruth McDonald.	120 international delegates in attendance.
18. The American Society for Horticultural Science published an article about the CSHS-GhIH partnership in its March 2011 newsletter.	3000+ members of ASHS received the information
19. An abstract about the CSHS-GhIH partnership project has been accepted for oral presentation at the Plant Canada meeting in Halifax in July, 2011.	expected attendance over 500
20. During the final months of the project, TPCCC members have been informed about the project through a newsletter, Mzungu Monthly, which is distributed to all members via email. This newsletter, written by Josh Sebastian, highlights	This has been an effective way of communicating on-the-ground happenings of the project in a timely manner. Mzungu Monthly has a direct circulation of 80 that includes TPCCC and CARES members, rural and sustainable development educators, NGO



<b>Description of activities</b>	<b>Explanation of how activities contributed to public awareness and understanding of international development issues</b>
project activities while he is in Tanzania on a professional exchange.	and donor agency directors, and provincial and local government politicians in Manitoba. Secondary distribution by 2 direct recipients of the Mzungu Monthly alone account for an additional 100 persons engaged in circulation. IDC member circulation of the Mzungu Monthly to both personal and professional contacts has directly resulted in communication to CARES and TSAEE by the University of Saskatchewan at Saskatoon's Canada Research Chair in Aquatic Ecosystems Health to pursue the development of a project
21. The project in Nepal was introduced to members of the Canadian Society of Agronomy by Dr. Derek Lynch (SADP-CSA project Canadian coordinator) at their Annual General Meeting in 2010 held at the University of Saskatchewan, Saskatoon in June.	The project in Nepal was introduced to the 201 members of the Canadian Society of Agronomy.
22. In June of 2010 a summary overview of the 3 AIC ITPP projects with CSSS partnerships (Sri Lanka, Vietnam, and Ethiopia) was presented to the AGM of the CSSS in Saskatoon.	This presentation was well received by the members, with several comments and questions raised in the discussion.

### **3. Community organizations**

AIC members and members of Canadian partner organizations live throughout Canada and have many contacts with rural and urban community organizations. This includes NGOs, youth groups, elementary and high schools, women's organizations, financial institutions, public media, colleges and universities, faith-based groups, community service groups, professional groups, and municipal, provincial and federal officials (both elected and public servants). Through these networks, AIC members have had many opportunities to share success stories about the International twinning Partnership Program and its activities. The opportunities and venues for public engagements were based on personal invitations to Canadian project coordinators, and through the initiative of Canadian coordinators to initiate events.

With 8 of the 17 Canadian project coordinators located in Manitoba, a majority of public engagement activities with community members also took place in Manitoba.

Indicators of increased understanding of development issues included:

- Direct donations of small amounts of funding to overseas partners for non-ITPP project-specific activities related to food security, climate change, women’s groups and micro-credit development
- Development of funding proposals based on increased knowledge of issues,
- Donation of items such as GPS units to overseas partners for Tanzanian extension activities,
- Coordination of fund-raising dinners and public speaking engagements,
- Ongoing e-mail communication resulting in increased understanding of issues related to international development.
- Liaison and collaboration in potential project spinoffs

Results include increased individual members’ ability to present accurate information about development issues, including gender equality and environment.

Increased awareness of development issues by AAFC staff at the participating locations: Lethbridge Research Station , Brandon Research Centre , AAFC International Scientific Cooperation Bureau, Science Director of the AAFC Ottawa Research Centre, and AAFC Research Farm in Bouctouche, New Brunswick.

An overview of activities:

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
<b>NGOs, CBOs, Non-Profits, Service Groups</b>	
1. Information presented to Marquis Project on TSAEE orange-fleshed sweet potatoes, energy-saving stoves and solar food dryers in 2006 to 2011	The Marquis Project developed annual funding proposals and received funding to support TSAEE under the Manitoba Council for International Cooperation’s Theme Grant Fund between 2006 and 2011 for projects related to agroforestry, energy saving cooking stoves, climate change, and gender & climate change.
2. Update on TSAEE project to People-to-People (SW MB) in 2006-07	People-to-People (SW Manitoba) provided small amounts of funding to TSAEE for projects related to agroforestry, energy efficient stoves, and establishment of the women’s enterprise network for the period of 2006 to 2011. AIC members have become members of this charitable organization.
3. Presentations on the Integrated Crop and Livestock Production in Northern Ghana project to the Brandon Food Co-op in 2007-08	8 people in Brandon increased their understanding of issues related to food security.

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
<p>4. March 2008, CSSS SRICANSOL project coordinator led a discussion on the role of international aid and social justice, <i>“Building Agricultural Capital and Strengthening Capacity in some Developing Countries: Examples of Canadian Aid Through ITPP and Relations to Social Justice”</i>.</p>	<p>This was an opportunity to get feedback from non-science, non-agriculture people. The result was an increased public awareness that sometimes small contributions through dedicated NGOs can be productive, efficient and impact large numbers of people in rural (subsistence) environments in developing countries.</p>
<p>5. While in Canada prior to the IPM of 2007, the three TSAEE delegates made presentations to an adult audience at an event announcing the 2<sup>nd</sup> annual “one Month Challenge” (a fair trade awareness campaign) through MCIC</p>	<p>Manitobans learned how fair trade benefits developing countries.</p>
<p>6. While in Canada prior to the IPM of 2007, the three TSAEE delegates presented to the Mennonite Economic Development Associates on micro-credit in TSAEE.</p>	<p>Exchange of ideas</p>
<p>7. TPCCC member assisted the Canadian Federation for Sexual Health with its concept paper for TSAEE on HIV/AIDS proposal.</p>	<p>Linkages established between HIV/AIDS in Canada and Tanzania.</p>
<p>8. Collaboration between the Canadian Society for Horticultural Science and the Canadian Society of Animal Science in preparing information on the two Ghana projects for presentation to the Ghanaian Union of Manitoba in 2008.</p>	<p>Canadians of Ghanaian heritage are aware of support for agricultural activities in Ghana.</p>
<p>9. The organization, Bridges of Hope, received an update on GSAP from one of the Canadian Project Coordinators in 2008.</p>	<p>Bridges of Hope developed a project that supported the GSAP groups.</p>
<p>10. Drawing on examples from the ITPP, a Canadian Society of Soil Science coordinator for SRICANSOL II gave a presentation on <i>Alleviating Poverty and Hunger in Some Developing Countries</i> to community groups in Virden, Manitoba in March 2009.</p>	<p>Sharing of ideas</p>

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
11. A TPCCC member presented an overview of TSAEE efforts to an audience of approximately 60 at the Marquis Project Annual General Meeting in June of 2009.	Marquis Project continues to partner with TSAEE on projects related to agroforestry and climate change through funding granted by MCIC.
12. Another TPCCC participant gave a presentation to 15 members of People to People (PTP) in the Hartney area of Manitoba.	People to People continues to support TSAEE’s work with women’s groups on energy efficient stoves, tree planting and women’s network association.
13. TPCCC member made a presentation to an adult group of 41 (36 women, 5 men) in Gimli in 2010.	Increased awareness of international development issues related to agriculture and water quality of fresh-water lakes (L. Victoria in Tanzania and L. Winnipeg in Manitoba).
14. On behalf of the SRICANSOL II project, one of the Canadian coordinators made informal presentations to the Rotary Club of Winnipeg, Charleswood.	Increased public’s knowledge about project purpose, activities and results.
<p>15. The Tanzanian Project Canadian Coordinating Committee (TPCCC) was very active in preparing for and hosting the TSAEE professional exchange to Canada in May/June 2010, including presentations to these NGOs and service groups:</p> <ul style="list-style-type: none"> <li>▪ Marquis Project</li> <li>▪ People-to-People group in Brandon, Manitoba</li> <li>▪ Minnedosa Rotary</li> <li>▪ Meewasin Rotary in Saskatoon</li> <li>▪ Saskatoon North Rotary</li> <li>▪ ManSEA</li> <li>▪ International Development Enterprises</li> <li>▪ MCIC</li> </ul>	<p>TSAEE Coordinator Beny Mwenda was named Global Citizen for 2010 by The Marquis Project of Brandon, receiving media coverage in south-western Manitoba.</p> <p>Donations of funds were received by TSAEE for non-ITPP project-specific activities in Tanzania.</p> <p>Ideas were shared related to alternative energy with ManSEA.</p> <p>Drip irrigation kits were sent to Tanzania from IDE.</p>
<b>Media</b>	
16. Interview with local television station in Brandon, Manitoba on extension work in Tanzania in 2006-07.	The Noon Show on CKX Brandon was broadcast throughout South West Manitoba for increased public awareness.

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
17. An article about a TPCCC member was posted on the MCIC website for their International Development Week Tanzania focus in 2008.	Increased public's knowledge about project purpose, activities and results.
18. While in Canada prior to the IPM of 2007, the three TSAEE delegates were interviewed for a video series by Mennonite Economic Development Associates on micro-credit in TSAEE.	Exchange of ideas
19. In 2010, the TSAEE-TPCCC project was featured in newspaper articles including the Rivers (MB) Banner on May 21, 2010, Interlake Spectator (Gimli, MB) on May 22, 2010, and Brandon Sun (Manitoba) on June 1 & 2, 2010.	Increased public's knowledge about project purpose, activities and results.
20. A news release was published in the Virden Empire Advance, a local regional newspaper in western Manitoba as a promotion of the public presentation ETCANSOL project coordinator	Increased public's knowledge about project purpose, activities and results.
<b>Education: Primary and Secondary Students</b>	
21. Canadian Coordinating Committee for TSAEE – Presentation to Deloraine, MB Elementary School grade 3 students in 2006.	Increased awareness of global issues by Canadian youth
22. Canadian Coordinating Committee for TSAEE –conducted workshops with 2 groups of middle year students in Manitoba on April 23, 2007 entitled "Youth Making a Difference"	Increased awareness of global issues by Canadian youth
23. While in Canada prior to the IPM of 2007, the three TSAEE delegates made presentations to students from several schools in Beausejour, MB.	Rural development ideas were shared with students
24. The Tanzanian Project Canadian Coordinating Committee (TPCCC) hosted the TSAEE professional exchange to Canada in May/June 2010, including a presentation to a teacher and 3 students from Carrot River High School, Saskatchewan.	Students in Canada exchanged letters with youth in Tanzania involved in environmental clubs.

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
<b>Education: Universities and Colleges</b>	
25. Participation in “One Night in Tanzania” event at Brandon University in 2006-07.	Involved youth at BUSU developed funding proposal to the Manitoba Council for International Cooperation under the Community Solidarity Fund for a one year twinning project in Kenya.
26. TSAEE Project Canadian Coordinating Committee worked closely with an Assiniboine Community College Land and Water Management student on climate change in Tanzania, particularly in the Tabora area.	Student became an executive member of CARES and international project coordinator after graduation.
27. A TPCCC member mentored an Assiniboine Community College (ACC) student through the final stages of his thesis studies in project work with TSAEE and the Marquis Project. These studies extended to an in-college partnership with the ACC Web Design class for the development of visual climate change instruction aids to be used throughout TSAEE programming in Tanzania.	Eighteen web design students were directly engaged as participants to aiding the efforts of TSAEE and the TPCCC. The culminating results of this mentorship extended to include the presentation of the TSAEE project in public poster displays at the Manitoba Conservation District Member Conference in April and ACC open house in June of 2009.
28. Tom Beach (Program Coordinator) gave a presentation on women and food security to students and faculty at Concordia University using ITPP project examples.	Increased awareness by students and faculty of the role of professional organizations in international development and gender equality as it relates to agriculture.
29. Canadian Society for Horticultural Science – The project was highlighted in an article in the Department of Plant Agriculture, University of Guelph, April 2007 newsletter	Wide distribution to the U Of Guelph community increased knowledge about project purpose, activities and results.
30. Canadian Society for Horticultural Science – The project was highlighted in a presentation to the Ontario Agricultural College in May 2007	35 in attendance Increased knowledge about project purpose, activities and results.
31. Prior to the IPM in November 2007, visiting GhIH delegates gave presentations to the University of Guelph, Department of Plant Agriculture	25 in attendance Increased knowledge about project purpose, activities and results.

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
<p>32. Prior to the IPM in November 2007, delegates from TSAEE met with Assiniboine Community College Vice-President Academic, Deans and invited guests.</p>	<p>Areas for potential future collaboration were discussed. Resulted in sharing of curriculum on GIS to train TSAEE officers in 2010 and mentoring of ACC students on capstone projects with Tanzanian focus in 2009, 2010 and 2011. An ongoing relationship between ACC and TSAEE is being facilitated in 2009.</p>
<p>33. The Tanzanian Project Canadian Coordinating Committee (TPCCC) hosted the TSAEE professional exchange to Canada in May/June 2010, including presentations to:</p> <ul style="list-style-type: none"> <li>• School of Business, Agriculture &amp; Environment of Assiniboine Community College</li> <li>• Assiniboine Community College retirees</li> </ul>	<p>An ongoing relationship between ACC and TSAEE was reviewed, and led to student mentoring of projects focused on Tanzania, and provision of GIS curriculum to use in Tanzania for TSAEE projects. This has included discussions for resource sharing with ACC School of Business, Agriculture and Environment administrators and instructors. In partnership with both TSAEE and the Marquis Project, ACC students are developing gender based responses to climate change impacts including curriculum development and GIS applications that complement ongoing TSAEE programming in Ukiriguru. Retirees reflected on past educational partnership experiences in Tanzania.</p>
<p>34. Dr. Lynch gave a presentation on the Nepal project to students and faculty at the Nova Scotia Agricultural College.</p>	<p>Ongoing interest and support expressed</p>
<p>35. Objectives of the ETCANSOL project, plus the potential role it can play in food security, were presented during discussions at the McGill Conference on Global Food Security in October 2010.</p>	<p>The discussions led to an interview with Radio Canada International for among other topics more detailed discussion of the Ethiopian and other ITPP projects</p>
<p><b>Women's Organizations</b></p>	
<p>36. <i>Canadian Coordinating Committee for TSAEE</i> – Presentation to the Southwest Regional Board of the Manitoba Women's Institute in 2006-07, 2008.</p>	<p>Ongoing interest and support expressed by an organization of active community women.</p>



<b>Description of activities</b>	<b>Explanation of how activities contributed to public awareness and understanding of international development issues</b>
37. <i>Canadian Coordinating Committee for TSAEE</i> – Presentation to the Manitoba Association of Home Economists, Southwest Branch in 2006-07.	Members of MAHE-SW (all female) organized annual fundraising dinners in 2007, 2008 and 2009 with proceeds going to The Marquis Project of Brandon, a CBO, to support its international development work in Tanzania. [The SW Branch disbanded in 2010 and joined the provincial MAHE.]
38. <i>Canadian Coordinating Committee for TSAEE</i> – Presentation to the Marsville (Ontario) group in 2006-07	Rural development ideas were shared with 40+ people.
39. While in Canada prior to the IPM of 2007, the three TSAEE delegates participated in a South West Manitoba Farm Women’s bus tour.	Rural development ideas were shared with rural women leaders on the bus tour of 40 people.
40. (TPCCC member gave a presentation on the TSAEE project to the Basswood Women’s Institute in 2010	\$50 donation from the WI was provided to support pre-school students at Kilimo Primary School at Ukiriguru.
41. TPCCC member made a presentation about gender and the TSAEE project to the 2011 Manitoba WI Conference in May.	120 women from Manitoba and one from the Associated Country Women of Canada from Newfoundland attended the presentation.
<b>Faith Based Groups</b>	
42. Presentation on youth development projects in Tanzania to Boissevain, MB UCW in 2006	Ongoing support to social justice issues by community women.
43. <i>Canadian Coordinating Committee for TSAEE</i> led a Manitoba United Church congregation in a service which used the partnership between Canada and Tanzania as the basis for worship and discussion, Sept. 23, 2007.	Ongoing support to social justice issues
44. Canadian Society of Animal Science (CSAS) – Canadian Coordinators gave presentations on the Integrated Crop and Livestock Production in Northern Ghana project to a small church group in Manitoba	3 members were updated
45. Dr. Shannon Scott (Canadian co-coordinator of the GSAP-CSAS project) presented a report on the integrated crop and livestock project to the Richmond Park Mennonite Church in Brandon, Manitoba.	approximately 150 members were informed



Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
46. Two informal public presentations and discussions about ETCANSOL were sponsored by church organizations in Winnipeg and Virden, Manitoba.	Ongoing support to social justice issues
<b>Government/Public Service</b>	
47. Presentation of TSAEE model and results to a group of MAFRI staff involved in developing a proposal for northern Manitoba development in 2006	MAFRI's proposal incorporated some of the elements that were successfully used in Tanzania
48. Canadian Society of Animal Science (CSAS) – Canadian Coordinators gave presentations on the Integrated Crop and Livestock Production in Northern Ghana project to scientists, technical and support staff of AAFC and Alberta Agriculture at the Lethbridge Research Station (40+), to the Brandon Research Centre (25)	65+ scientists increased their understanding of food security issues and beneficial management practices in Upper West of Ghana.
49. While in Canada prior to the 2007 IPM, Dr. Kwame Oppong-Anane and Eddie Sottie from GSAP gave a presentation at the AAFC Lethbridge Research Centre (40+)	Resulted in one of the AAFC scientists donating all of her back issues of the Canadian Journal of Animal Science to GSAP (a value in excess of \$10,000) to GSAP.
50. Drs. Tran Thi Tam and Mai van Trinh visited Ottawa prior to the 2007 IPM to conduct meetings with the Canadian Coordinator to promote the CLMPAV project. They met with the Vietnamese Ambassador to Canada to describe the ITPP.	The Vietnamese Ambassador to Canada was briefed on the aim and objectives of the CLMPAV project.
51. Drs. Tran Thi Tam and Mai van Trinh visited Ottawa prior to the 2007 IPM. They met with the AAFC International Scientific Cooperation Bureau.	This meeting was highlighted in the November 2007 AAFC monthly bulletin, which goes out to more than 2,500 AAFC employees across the country
52. Drs. Tran Thi Tam and Mai van Trinh visited Ottawa prior to the 2007 IPM. They met with the Science Director of the AAFC Ottawa Research Centre and held individual meetings with 12 scientists at the Centre.	The CLMPAV Project was discussed and research interests and projects were shared. VSSS partners learned about relevant research being conducted by AAFC.

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
53. Prior to the 2007 IPM, coordinating members of SRICANSOL II and members of CSSS participated in technical discussions with staff at the Lethbridge Research Centre.	This opportunity was highlighted by a tour of the station’s manure management and mortalities composting research facilities. Manure management is just in beginning stages of discussion in Sri Lanka and this visit added significantly to the issues requiring research in Sri Lanka.
54. November 2007, SSSSL SRICANSOL project coordinator presented seminar to scientific and technical staff at the Lethbridge Research Station, <i>“Issues, Limitations and Challenges in Food Crop Agriculture in Sri Lanka”</i> .	This seminar highlighted some of the major issues affecting food crops production in Sri Lanka. There were mutual concerns for the proper management of agricultural inputs such as fertilizers and micro nutrients which, if not used properly can pose risks to the quality of drinking water and human health.
55. Prior to the IPM in November 2007, visiting GhIH delegates gave presentations to AAFC Research Farm in Bouctouche, New Brunswick and Atlantic Food and Horticulture Research Centre in Kentville, Nova Scotia	40+ scientists increased their understanding of food security issues and beneficial management practices in horticulture in the Upper West of Ghana.
56. While in Canada prior to the IPM of 2007, the three TSAEE delegates participated in a presentation on the TSAEE project to the AAFC Brandon Research Centre.	25+ scientists increased their understanding of food security issues and beneficial management practices in Tanzania
57. While in Canada prior to the IPM of 2007, the three TSAEE delegates met with MLA Peter Bjornson and Gimli Mayor Tammy Axelsson.	They discussed parallels between environmental and lake issues found in respective areas. This led to the RM of Gimli establishing a partnership project with TSAEE on lake friendly agricultural practices with youth in 2010-2011 in Manitoba and Tanzania.
58. With SRICANSOL II and other ITPP projects as examples, coordinator gave a presentation to the Workshop on Agricultural Land Use and its Effect in APEC Member Economies, October 19-23, 2009, Beijing China	Entitled <i>“Flexible Farming System Strategies for Economic and Environmental Sustainability: Reflections on experiences in several developing economies”</i> .

Description of activities	Explanation of how activities contributed to public awareness and understanding of international development issues
<p>59. J. Owen, D. Ceplis, M. Pritchard, M.R. McDonald, P. Kumah, I. Idun, G. Mahunu and A. Abdul-Halim. 2010. <i>CSHS Partnership with Ghana Institute of Horticulturists works to support vegetable horticulture and improve livelihoods</i>. Poster presented at the Sen. Hervé J. Michaud Research Farm Field Day, Aug. 12, 2010 in Bouctouche, New Brunswick by J. Owen.</p>	<p>Audience: 205 people from the public.</p>
<p>60. J. Owen. 2010. CSHS-GHIH Dry Season Vegetable Project: Slide show and general information presentation made at the Hervé J. Michaud Research Farm. August 26, 2010.</p>	<p>About 20 AAFC staff and students</p>
<p>61. The Tanzanian Project Canadian Coordinating Committee (TPCCC) was very active in hosting the TSAEE professional exchange to Canada in June 2010, including presentations to Manitoba Water Stewardship Minister Christine Melnick in Winnipeg.</p>	<p>Awareness about shared issues related to environmental and water related to Lake Winnipeg and Lake Victoria</p>
<p><b>Business</b></p>	
<p>62. The Tanzanian Project Canadian Coordinating Committee (TPCCC) hosted the TSAEE professional exchange to Canada in June 2010, including presentations to Aerial Insight GIS.</p>	<p>A seasonal employee of the company has become an AIC member and contributed to map-making for GHIH and TSAEE.</p>

**K. Progress achieved following the recommendations of the Program evaluation**

Updates on progress achieved in addressing the recommendations of the 2005-06 Program evaluation were included in each ITPP semi-annual and annual report. Appendix 3 provides a final review of Program responses to the evaluation recommendations.

**L. Shared responsibility and accountability for results on the part of the Organization's partners**

Over the five years of implementing the ITPP, AIC staff and members volunteering with the ITPP encouraged and promoted the values of local ownership, and participatory processes, and the principles of genuine partnership and joint responsibility.

As ITPP participants, both Canadian and Southern partner organizations signed Three Party Agreements and accepted being jointly accountable for upholding

commitments made during the project planning and design and sharing responsibility for achieving results and managing funds against pre-planned budgets.

Southern partner organizations were thoroughly involved in the design, delivery, monitoring, evaluation, and reporting of projects in a process that enhanced ownership and improved sustainability of the results.

The ITPP encouraged input from both groups of beneficiaries - the Southern partner organizations' members and the rural participants - in the planning, implementation, assessment and reporting of project activities. The strategies and activities used with both groups reflected good governance principles of inclusion, participation, equality accountability, and transparency.

*GSAP collected data on adoption of improved methods and involved stakeholders and beneficiaries in the identification of needs and assessment of results through discussions at the beginning of the project, half way through the project and during the final year of the project.*

Beneficiaries and stakeholders were involved in the project design, planning, implementation, monitoring and evaluation of results, sharing ownership and responsibility for them.

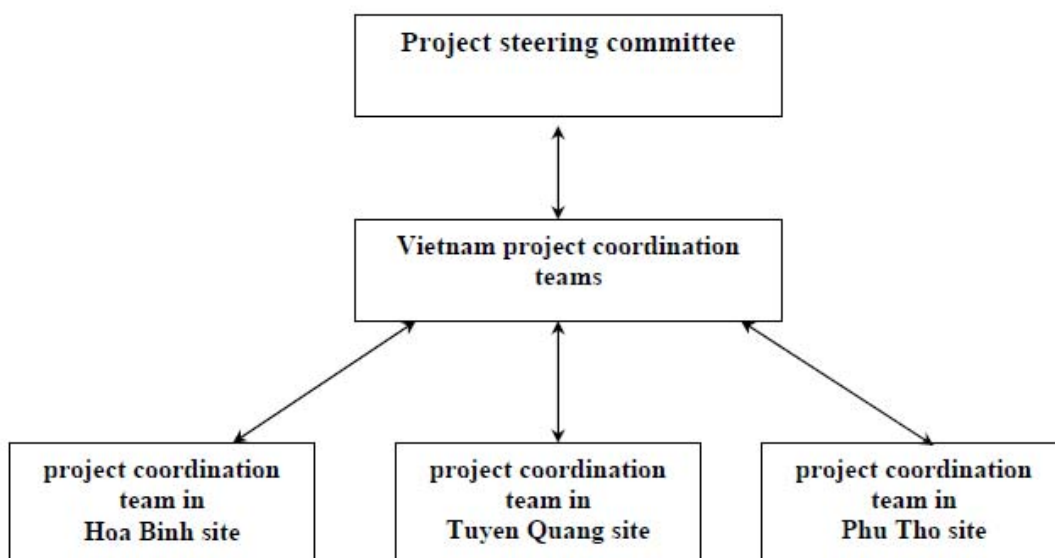
*SADP conducted a needs assessment through surveys and workshops with beneficiaries in the Kalesti Valley of Tanahu District and stakeholders including the Institute of Agriculture and Science, the Society of Agricultural Scientists – Nepal, the Nepal Horticultural Society and district government departments.*

Southern partner organizations confirmed rural target groups and identified needs, wants and responsibilities of rural and organizational beneficiaries through baseline studies, workshops, focus groups, organizational assessments and consultations with local advisory boards, meetings of community leaders, scientific society committees and members, and value chain sectors.

*GHIH conducted a baseline study in 2006 and another one in late 2010. Data was collected from direct and indirect beneficiaries and a control group through questionnaires, interviews, focus group discussions and surveys. The Project Coordination Team coordinated the assessment and discussion of results with beneficiaries and stakeholders through focus group discussions, Farmer Field Schools, site visits and training.*

In each of the project countries, partner organizations collaborated with government agencies, academic and research institutes, NGOs and community based organizations for the delivery and implementation of project components. In many cases, the relationships and responsibilities were formalized by signing memoranda of understanding (MOU) which supported current endeavours and ensured sustainable results through the adoption of project approaches into on-going government or NGO programs.

*The NISF branch of VSSS uses a structure that involves beneficiaries, stakeholders, members and collaborators. A Project Steering Committee oversees management of the project which the Project Coordination Team implements through Site Coordination Teams that include village groups, farmer groups, women’s groups, commune groups and stakeholders from government ministries of agriculture, forestry and extension, universities and research institutes.*



*Through the Site Coordination Team, the NISF branch of VSSS gathered data by questionnaires, surveys, interviews, observation and focus groups and involved beneficiaries and stakeholders in the discussion and analysis of the results during Field Schools, training and workshops.*

Canadian and Southern scientific society members brought scientifically proven, environmentally sustainable technology and methods, and joined with the work of strategically chosen government departments, NGOs and community groups to initiate, support and complement extension activities, technology and methods.

The result was a cohesive initiative that recognized each project group's beneficiary input and direct knowledge of the local context – cultural, political, economic, geographic and climatic - and was based on the scientific expertise and knowledge of members of all partner organizations.

Coordination of projects was carried out jointly by volunteer Project Coordinators in Canada and in the project country who were appointed by the elected Executive of their member organization. AIC provided oversight, formal management functions and support through training, templates, facilitation of working groups and task teams, critiquing of plans, budgets and reports and regular communication.

Accountability and the authority to fulfill responsibility was formalized in Three Party Agreements between AIC, the Canadian and the Southern partners; and between the Southern partners and organizations they collaborated with through MOUs. The Executives of the Canadian partner and Southern partner organizations provided a letter of support for the projects and the AIC Board of Directors committed to the project by approving the signing of the Contribution Agreement with CIDA.

Southern Project Coordinators were responsible for the local implementation of the project activities, project management, monitoring and reporting. Project Coordinators had the authority to make day to day project decisions and they relied on Project Coordinating Committees, with input from Steering and Advisory Committees, which were representative of beneficiaries and other stakeholders, to guide the project, monitor activities and assess and analyse results. The Southern partner organization Executive formally accepted project plans and budgets, made major decisions and, through reports from Project Coordinators, monitored results and activity for non-compliance, corruption and conflict of interest and ensured they met their obligations and responsibilities as outlined in the Three Party Agreement.

SPOs built transparency about the projects through annual reports to members and in newsletters.

Canadian Project Coordinators (CPOs) monitored results, resources and risks including non-compliance, corruption and conflict of interest, through quarterly and semi-annual reports and monitoring trips. Through regular communication, Project Coordinators were actively involved in project design, strategy discussions and implementation, and in identifying end of project results. They reviewed plans, budgets and reports before sending them to AIC, and their agreement was necessary for any changes in project direction, partnerships, plans and budgets.

CPOs built transparency through shared information about projects with Canadians, including scientific society members, and through public engagement activities (see Section J on Public Engagement).

AIC staff were accountable for management and monitoring of projects, reporting project results to CIDA and apprising the AIC Board of resources, results and risks, including noncompliance, corruption and conflict of interest through monthly financial and semi-annual narrative reports.

## **M. Sustainability of results beyond the life of the Program**

Whether working at the community level, within partner organizations, or between participating partner organizations, the program encouraged and promoted values of local ownership, inclusive and participatory processes, and principles of genuine partnership, equity and transparency.

### **Sustainability of Results Highlights at Organizational Level**

The organizational results that are a priority to sustain are strong scientific societies (Southern partners) that involve their members in meaningful activities and, through that, have a high profile nationally. This is possible by keeping organization members involved in providing scientific expertise to rural beneficiaries. This can be done with some funding from other sources and collaboration with local stakeholders.

For each partnership, a Three Party Letter of Agreement was signed between the Agricultural Institute of Canada, the Canadian partner organization and the Southern partner organization. This agreement outlined the spheres of responsibility, voluntary human resource allocation and accountability for the successful achievement of project results. The frequency of reporting was detailed in a Three Party Agreement between AIC, the CPO and the SPO, and included consequences for not meeting requirements.

SPOs used standardized templates developed by AIC staff to report progress toward results, resources used, and levels of risk. Throughout the program, frequent communication took place between AIC, Canadian and Southern partner organizations.

AIC consulted with its members and relied on them, partners and collaborators to assist in implementing programs and to give guidance and direction through committees and task teams. Local ownership of projects was addressed through the establishment of in-country project coordination committees (PCC) or field implementation teams (FIT) comprised of inter-disciplinary volunteer members and elected executive members. These teams developed project management models which fit local decision-making needs.

Canadian and Southern partners were trained on using Results Based Management (RBM) and developed a good understanding of the concept and the process. Improving RBM skills was strongly encouraged and supported through local training, written modules, workshops and critiquing reports. Partners gathered data disaggregated by gender, used measurable indicators and began to use indicators specific to gender equality and to environmental changes.

Each country component submitted an annual plan and budget, and quarterly, semi-annual and annual reports to the CPO for their review, critique and additions before they were finalized and submitted to AIC. AIC staff reviewed all reports, gave constructive comments to improve implementation and reporting and asked questions to elicit specific information that assisted in monitoring and assessing activities, risks, methodologies and results.

AIC provided information and updates to members through its weekly AIC NOTES, monthly newsletter, and annual report.

At the organizational level, individual projects took steps which focused on building the capacity of existing members and student members (male and female). This was accomplished through implementation of various strategies such as workshops, seminars, skills training in specific management and gender equality areas, expanded linkages with members across geographic and employment areas, and the creation of new management and membership structures.

Organizations established and collected membership fees and gained operational funds through consultancies and contracts with other funders. Southern Partner Organizations (SPOs) strengthened their financial sustainability by increasing membership numbers, thereby increasing the revenue gained through membership fees and dues, as well as adding to their human resource capital. By increasing members' skills, some SPOs were positioned to generate income by providing training programs, advisory services, lectures and workshops at a fee to other organizations and non-member individuals. Some SPOs raised funds by publishing professional journals, selling subscriptions and collecting page charges from authors. This generation of funds considerably reduced dependency on ITPP funding to support AGMs by some SPOs.

Organizations considered succession planning in their operations. SPOs diversified their membership through attracting and maintaining female, student and senior scientist members and those from more remote geographic and varied technical areas. Some SPOs established scholarships for female graduate students in the agricultural disciplines to promote interest in the academic discipline.

AIC received voluntary support from Canadians through committees and task teams, and the seven-member elected Board. The Gender Equality Mainstreaming (GEM) working group and the AIC Task Team on Climate Change (ACT2) contributed regular news updates to members through monthly and special reports; each has seven Canadian members.

Through these activities, partners and AIC members acquired skills that they can use with other and future projects (agricultural and rural development). Members have indicated that they are actively involved and want to remain involved, whether future funding is available or not. AIC its members and partners have developed proposal preparation skills to submit proposals for funding from other sources. AIC, its members and partners have skills that can be used to sustain organizational activity and some rural and agricultural development activity.



Specific examples include:

ETCANSOL	<ul style="list-style-type: none"> <li>• The establishment of nodes serves as a means to strengthen the sustainability of results; they have expanded the reach and impact of ESSS and have become drivers of ESSS activity. The establishment of nodes had a very positive influence on the membership awareness and willingness to participate in ESSS and in the ETCANSOL project.</li> </ul>
GhIH	<ul style="list-style-type: none"> <li>• Considerable reduced dependency on ITPP funding to support AGMs</li> <li>• To reduce dependency on GhIH executive and project coordinators, the GhIH members in the Upper West Region were charged to undertake activities when needed.</li> <li>• Student groups have been involved through mentoring to full membership after school</li> <li>• Rotation of the venue for AGM from zone-to-zone</li> <li>• Involvement of industry stakeholder in GhIH activities at the national and zone levels.</li> <li>• GhIH was awarded small funding from Trellis Fund, USAID to link NGO and graduate students of US for research in orange fleshed sweet potatoes in Upper West Region for a 6 month project formally starting from June 2011 to December 2011.</li> </ul>
GSAP	<ul style="list-style-type: none"> <li>• Appointment of a senior scientist with proven track record in scientific writing as the editor-in-chief of Ghanaian Journal of Animal Science (GJAS) ensured timely and sustainable publication of the journal.</li> <li>• Broadening the Field Implementation Team by inclusion of MoFA officials and university lecturers provided continuity in field activity implementation.</li> <li>• Enhanced financial status of GSAP as a result of the growing membership provided the momentum required to ensure the sustainability of the society and the project.</li> <li>• Structuring the Project Coordinating Committee in such a way that the sitting GSAP President would automatically become a member ensured continuity as well as the full participation of GSAP members in project activities and, conversely, of communication of project activities to GSAP members.</li> <li>• Payment of journal page charges by authors, increased journal costs recovery and membership dues generated additional income to ensure financial sustainability.</li> </ul>
SADP Nepal	<ul style="list-style-type: none"> <li>• Training on gender balance was conducted to strengthen and share information with members. A series of meetings was held to provide opportunity to involve members in informative seminars and workshops.</li> <li>• Project Manager of organization participated in Project Cycle Management training (PCM) including Results Based Management organized by “International School of Advance Studies (ISAS)” and discussed and oriented about PCM to other staff members in the</li> </ul>

	<p>organization.</p> <ul style="list-style-type: none"> <li>• During the project period district level offices like District Agriculture Development Office (DADO), District Livestock Service Office (DLSO), District Forest Office and District Soil and Watershed Conservation Office have coordinated with SADP for the support in project activities. DADO have allocated fund for the establishment of training hall in resource centre while the officials are involved as resource person in training programs.</li> <li>• SADP formally linked up with academic institute like Institute of Agriculture and Animal Science (IAAS) for research component, scientific societies like Society of Agriculture Scientists (SAS) and Nepal Horticulture Society (NHS).</li> <li>• Recently SADP is awarded to Trellis fund, USAID (small project) to link NGO and graduate students of US for research in disease of Tomatoes (bacterial wilting and powdery mildew) in Tanahu district as 6 months project formally starting from June 2011 to December 2011. In this way, apart from AIC project, SADP will be applying for the national and international projects and will be link for the financial sustainability.</li> </ul>
SRICANSOL	<ul style="list-style-type: none"> <li>• The number of female students entering the Faculty of Agriculture and specializing in Soil Science increased by 30% during the past 5 years. The Project facilitated the establishment of the student chapter of SSSSL which offers equal opportunities for both male and female students to hold leadership positions and participate in society activities in general. This could be the main reason for the increase. It also indicates the increased interest shown by women towards agriculture.</li> <li>• The Project offered equal opportunities for male and female members to participate in Project activities and also hold leadership positions as members of the steering committee, site leaders, co-site leaders and as co-workers. The total membership of the Society which stood at 197 (85% males and 15% females), in 2006 i.e. at the inception of SRICANSOL II, increased to 262 (77% males and 23% females) by 2011. The 25% increase is mainly attributable to the many awareness programmes, workshops, progress review meetings, field days, field visits to Project sites, seminars etc. organized by the team leader and site leaders. The increase in the percentage of female members during the past 5 years could be mainly attributed to the many opportunities made available to women members by the Project.</li> <li>• Conducted training programmes on GIS (4), RBM (1) and GE (1) for membership to improve their skill on the subject.</li> <li>• Project supported to acquire equipment such as computers, scanners, printers, plotter, photocopying machine, GPS receivers, multimedia projector. This equipment will help to improve the infrastructure capability of SSSSL. These instruments will be used for further dissemination of BMPs.</li> <li>• Prepared leaflets, fact sheets on BMPs. These materials will be used by</li> </ul>

	<p>the SSSSL members, extension workers of Government and NGOs, students and farmers etc. to improve their knowledge and disseminate BMPs. These materials will be sold at nominal price and the funds collected will be strengthening the SSSSL financial sustainability.</p> <ul style="list-style-type: none"> <li>• Improved the knowledge of SSSSL membership on BMP s through field visits to study sites, so that wider knowledge on BMPs has been given to them. This knowledge will improve their designing and analytical capability, which will be useful in their regular and future work.</li> <li>• Members of the student chapter gained knowledge on BMPs and GIS through training programmes and working with experienced researchers. Seven student members conducted their final year research projects in some of the study sites under the supervision of site leaders. All these activities will pass the knowledge and experience to future generations.</li> <li>• Developed income generating initiatives – membership fees, sale of publications, rental of resource centre, and fees for field trips, potential to charge for training and workshops for non members for SSSSL to ensure the SSSSL is financially viable to carry out future activities.</li> <li>• Officers in the study sites (districts) have increased their knowledge on BMPs by participating training programmes and field days and they have noticed the outcome of applied BMPs. They have already pledged that they will continue to implement similar programmes in their regions.</li> </ul>
TSAEE	<ul style="list-style-type: none"> <li>• TSAEE at the Lake Zone Coordinating Office in Misungwi (LZCOM) throughout the full term of the project has undertaken a strategy of grassroots organizational capacity building at the district/branch level.</li> <li>• After the initial mobilization of the district/branch (constitutional review, benefits of TSAEE membership, etc.), TSAEE LZCOM has then facilitated the inauguration of new offices with additional training in proposal writing workshops and specific capacity building needs as identified by members (ICT, efficient energy technology, etc.). This has ensured that branch members have the ability to develop and access active sources for the application of their skills in the field. In new branch office projects, TSAEE LZCOM provides guidance in proposal development and shares portions of project management responsibility to ensure that the initial project is delivered smoothly.</li> <li>• By this method described above, members gain outlet for the tangible application of their skills in the field that advance their professional abilities while assisting in life improvement in rural Tanzanian communities. Additionally, that active avenue of engaging in project development and delivery has ensured that a wider base of membership maintains active links to the national and international programs in the delivery of rural based agricultural life improvement projects.</li> <li>• This process has been utilized to inaugurate 5 new districts in the Lake Zone as well as 2 newly active TSAEE Zones at Tabora District (Western Zone) and Singida District (Central Zone).</li> <li>• To ensure the ongoing viability of TSAEE, the LZCOM has further initiated</li> </ul>

	<p>formal organizational processes that encourage the participation and ownership of the organization by members. This includes the holding of annual general meetings and implementation of organizational assessment and strategic planning processes that has motivated the revitalization of TSAEE nationally.</p>
VIETCANSOL	<ul style="list-style-type: none"> <li>• Strategies include setting up demonstration sites as training bases; conducting training; carrying out cross visits (Canadian personnel to Vietnam, and vice versa, including South-South visits in the ITPP).</li> <li>• Growth in membership partially due to the opportunities to participate in project endeavours.</li> </ul>

### **Sustainability of Results Highlights at the Community Level**

The community results to maintain are centred on effective rural and agricultural development focused on knowledge and financial sustainability. This was possible because of the increased capacity of rural groups and organizations and the skills and expertise of farmers and the long term involvement of stakeholders.

The sustainability of results at the community level is possible because there is increased capacity and collaboration of community and farmer organization groups. Local ownership of projects was addressed through support to group mobilization, formation and leadership. These groups were capacitated through their own efforts and by the scientific societies acting as catalysts. This led to increased and sustained capacity to maintain results in rural and agricultural development including farmer or community organizations as stakeholders and leaders.

At the community level, individual projects built sustainability by focusing on providing skills training to farmers and to extension officers working within the community sites, and by teaching skills to rural beneficiaries who developed beneficial management practices in agriculture, and providing resources on a cost-recovery basis. One key area of development was in implementing participatory approaches which assisted rural beneficiaries to articulate their own needs.

The examples below show the wealth of experience and skills acquired that members can now use to maintain and strengthen effective rural and agricultural development. The examples also show the additional support beyond CIDA and AIC that is now available to scientific societies to both strengthen and maintain, community and farmer organizations and conduct rural and agricultural development.

Results for financial sustainability at the community level included direct income benefits attained through production, marketing and processing skills and capacity developed through participation in the ITPP. Throughout the project, cost-sharing and cost recovery of material ensured that efforts were sustainable.

Specific examples include:

GhIH	<ul style="list-style-type: none"> <li>• AEAs (MoFA staff) will continue to facilitate field schools by integrating the activities into their programmes and report on them to GhIH and the District Director of Agriculture.</li> <li>• AEAs have received adequate training to initiate training activities. AEAs who want to extend FFS activities to others communities and come up with comprehensive programmes will be supported with training materials from GhIH to successfully implement it.</li> <li>• The GhIH team are in contact with executives and individual members of the WUAs by cell phones</li> <li>• Regional and District Directors of Agriculture have been involved by consultation, technical support and in-kind.</li> </ul>
GSAP	<ul style="list-style-type: none"> <li>• Involvement of NGO's in training, provision of advice to women groups and sale of products.</li> <li>• Provision of protective clothing and insecticide-treated mosquito nets to women on credit enabled the women to maintain good health to carry on with income generating activities.</li> <li>• Cost recovery of medications and protective clothing ensured sustainability.</li> <li>• Vaccination of small ruminants and poultry against common communicable disease reduced mortality and increased productivity to enhance income of women.</li> <li>• The interest shown in the activities of the women beneficiaries by the men in the communities encouraged the women to work harder.</li> <li>• Revolving loans and the high sense of commitment by the partner NGOs in management sustained the micro-credit system.</li> </ul>
SADP Nepal	<ul style="list-style-type: none"> <li>• At community level, farmer groups were strengthened and developed responsibility to lead in community and further institutionalized for the sustainability. The participatory approach was applied for this sustainability.</li> <li>• The 5 coordinator farmers of 5 farmers group were given TOT (training of trainers) on organic farming. The main aim is to develop them as technically sound trainer to train other members of farmers group and community. The community members learned about the marketing of organic products and its demand in national and international markets.</li> </ul>
SRICANSOL	<ul style="list-style-type: none"> <li>• Data base developed for each cropping / farming system and educated the SSSSL membership and other stake holders so that the information could be replicated in similar cropping / farming systems.</li> <li>• Training and demonstration on all BMPs were conducted individually for the beneficiaries and their effects tested in their own fields, thereby ensuring that the beneficiaries were convinced about the outcomes of the BMPs. Adopted BMPs have shown to increase yields and income - both factors will promote sustainability of practices.</li> <li>• Material assistance [rice husk burners, step ladders, pruning knives,</li> </ul>

	<p>pitchforks (an implement used to turn compost heap), over knee structures, cattle shed and compost sheds] given to farmers and farming communities / societies for continuation of BMPs.</p> <ul style="list-style-type: none"> <li>• Assisted the farmers in Neelawala to expand cattle rearing in the village by making contact with the Director, Central Province DAP&amp;H.</li> <li>• Provided a compost making shed to one beneficiary who has sufficient cattle manure and the capacity to produce more than his own requirement of compost, hence he could sell the excess to fellow farmers and obtain additional income.</li> <li>• Workshops and training for teachers and on farm training for school children to ensure the programme will continue.</li> <li>• Training of women’s organizations on compost making, food preservation techniques by making jams and chutneys and improve quality of spices, to give value addition to their products and additional income.</li> <li>• Established long term demonstration sites at Wattappola/ Panabokke on Kandyan Forest Garden. This site will continue to be maintained as a model site with support from line agencies (DOA, DOEA) and SSSSL.</li> <li>• Developed links between communities and line agencies in all sites to ensure that the introduced BMPs will be continued.</li> <li>• Publicity given at community level by erecting bill boards in prominent places, depicting Project activities and outcomes so that other farmers are made aware.</li> <li>• Educated future generation of the village by extending Project activities to teachers and students (GCE OL &amp; AL classes). E.g. Rajasinghe National School.</li> <li>• communities in Sri Lanka increased their knowledge and application of beneficial management practices, resulting in increased crop yields and the ensuing financial capacity to continue to do so.</li> </ul>
TSAEE	<ul style="list-style-type: none"> <li>• Tanzania group participants focused on achieving tangible goals that they set and are motivated to maintain what they have acquired.</li> <li>• The key component to ensuring sustainability of results amongst communities in the project has been the application of the tangible goals approach. In this process, ownership of the results that individual wish to achieve (modern homes, transportation, education, etc.) is identified by the participants themselves. In this manner, rather than offering prescriptive solutions, TSAEE works directly with individuals to achieve participant identified end goals. Participants therefore continue practices that improve income and facilitate the achievement of their personal goals while simultaneously realizing increased food production that fosters conditions of household food security.</li> <li>• Sustainability of the results is further enhanced amongst groups and individuals in the project in the pairing of enterprise strategies with improved production practices in agriculture. By this method, participants are able to produce increased yields in multiple crops and</li> </ul>

	<p>rural based enterprises through diversified market based planning so as to maintain their flexibility to withstanding changes in local commodity prices. The employment of basic financial skills (record keeping, entrepreneurship) along with BMPs (land husbandry, spacing, organic fertilization) ensure fundamental practices, in both agriculture and business, can be applied by participants in any rural agro-based enterprise of their choosing.</p> <ul style="list-style-type: none"> <li>• Consistent processes employed by all groups in their organization have been facilitated by assigned TSAEE project officers with initial training in leadership and group dynamics. This has fostered the use of democratic process amongst all groups participating in the project for the selection of their group executives of Chair, Secretary and Treasurer; decisions of their collective agricultural activities; and the use/investment of funds they have generated from their agricultural activities.</li> </ul>
VIETCANSOL	<ul style="list-style-type: none"> <li>• Local “ownership” of the project was achieved by employing Vietnamese scientific and agricultural extension experts, involving community organizations, and transferring on-farm research results and new technologies to farmers through a participatory approach so that they can apply what they have learned on their own lands and influence others to do the same.</li> <li>• Strategies to achieve this end include setting up demonstration sites as training bases; conducting training; and offering some material and technical support, especially to poor farmers. These activities are aimed at greater adoption of conservation practices and, ultimately, to greater agricultural, environmental, and economic sustainability at the household, village and commune level in project implementation sites.</li> </ul>

**Ways in which partner organizations were strengthened such that sustainability is enhanced**

The democratic structures and sound management systems fostered by the program helped organizations and communities establish the human resource capital and the financial base essential for accountability, transparency and sustainability. The ITPP encouraged and facilitated joint responsibility of all parties in monitoring and reporting. Members of the SPO who are beneficiaries of strengthening capacity, and members of the communities who are beneficiaries of the rural development initiatives, participated in implementation, monitoring and evaluation of activities led by the Project Coordinators of the SPO.

Peer reviews of project results, methodologies, technical innovations and risks were conducted during South South exchanges, development workshops and, every second year during presentations and workshop sessions at the International Partners Meeting,. AIC staff also used Monitoring Reports to help make recommendations on strategies, methods, plans, budgets and activities.

Systematic planning and monitoring was facilitated through ongoing communications. Canadian Partner Organization (CPO) members conducted project monitoring during Professional Exchange



trips at least once every two years. They used a Monitoring Report Form which focused trip activities and discussions on clear objectives including reviewing activities, financial systems, governance and operations, measuring progress and resources used, describing results, assessing risks and addressing key issues. The reports became a record of the review, discussion and agreement and a reference for all parties to conduct their work and to plan subsequent monitoring activities.

AIC staff visited each country-level project at least twice during the five years of implementation to monitor project activities, risks and results and to conduct a review of financial systems, procedures and documentation.

Governance has been strengthened which is demonstrated by the more complex activities and budgets. This capacity to plan, implement, monitor and report on projects has improved the capacity of SPOs to obtain external funding. This includes the proposal writing skills and the credibility from having implemented a project and demonstrating the administrative and development skills needed to manage it.

Expanded linkages have led to increased new memberships and contacts including potential stakeholders – see section 3. Increases in membership numbers, both female and male, and improved communication have led to increased geographic reach of organizations. This has resulted in increased networking among professionals in-country, including student members, thus building the viability of SPOs.

Specific examples include:

ETCANSOL	<ul style="list-style-type: none"> <li>• Have developed a strategic planning and management (SPM) strategy through consultations with key ESSS personnel and feedback from members and stakeholders. The SPM is crafted in such a way that it will serve as a guide for future programming.</li> <li>• As a result of the series of workshops the ESSS now has new contacts and a strong working relationship with the extension agencies and staff.</li> <li>• The establishment of nodes in various regions has allowed the ESSS to communicate with its members at least cost. For instance, during this last workshop, representatives from each of the regions were sponsored to ensure representation.</li> </ul>
GhIH	<ul style="list-style-type: none"> <li>• AGMs, National lectures, Support from Canadian Partners</li> <li>• Networking among zonal branches in conferences</li> <li>• Journal and newsletter publications</li> <li>• GhIH has a vibrant student groups across the country. The students have developed a five year strategic plan that would strengthen and sustain their activities. GhIH has mentoring programmes for the students especially the female students. Through these programmes the students have impacted positively in their communities and some of them have become successful full-members of the GhIH after their degree programmes.</li> </ul>



	<ul style="list-style-type: none"> <li>• The selection of different zonal locations to host the AGM indicated increased capacity of zones to organize such events.</li> <li>• GhIH reduced from 80% to less than 40% the funding from CIDA that supports its AGMs.</li> <li>• A membership newsletter is circulated by hard copy or by e-mail to all members. Members and public now are also able to access information on GhIH through the Institute’s website which was launched in 2009.</li> <li>• A popular GhIH-initiated seminar on scholarly published papers was absorbed by the Faculty of Agriculture at UDS (sustainability of program).</li> <li>• Through capacity building, GhIH members have accessed donor support through their places of employment, e.g. – World Bank project on solar dryers at KNUST, US-AID exchange with Texas A&amp;M University and University of Kentucky mentorship programs, chili pepper project at UDS on Global GAP funded by GTZ).</li> </ul>
GSAP	<ul style="list-style-type: none"> <li>• Ensuring community awareness of the effects of bush fires on the environment and of prevention common communicable diseases through talks by agriculturists and health officials respectively.</li> <li>• Empowering women to build viable groups responsive to the sheanut-livestock value chain.</li> <li>• Encouraging women groups to choose leaders democratically and hold regular planning meetings.</li> <li>• Linking women groups to specialized NGOs for assistance in training, advice and sale of products.</li> </ul>
SRICANSOL	<ul style="list-style-type: none"> <li>• The total membership of the Society which stood at 197 in 2006 (85%M, 15%F) increased to 262 (77%M, 23%F) by 2011. The 25% increase is mainly attributable to the many awareness programs, workshops, progress review meetings, field days, field visits to project sites, seminars, etc. organized by the team leader and site leaders.</li> <li>• Financial sustainability of SSSSL through greater income generation from membership fees, member’s contributions for field trips, sale of publications, renting of SRICANSOL Resource Centre facilities, donations, fees for conducting training for government and non government staff etc.</li> <li>• Members were able to improve their skills on, proposal development, financial management and gain new knowledge on assessment of in-kind and gender related matters, project report writing, GIS and Remote Sensing, Risk Assessment.</li> <li>• Acquired equipment through the project which strengthens the infrastructure facilities of the SSSSL. This equipment will further strengthen the delivering capacity of society activities.</li> <li>• Gender expertise of the membership has been strengthened through the GEM working group newsletters and contacts with GEM members.</li> <li>• Support to student chapters encouraging new members and succession planning.</li> </ul>

	<ul style="list-style-type: none"> <li>• Signing of MOU with Department of Agriculture to set up a national database at the Natural Resource Management Centre, University of Peradeniya</li> <li>• Central Province DAP&amp;H impressed by the Project activities in Neelawala to popularize compost production and reduce chemical fertilizer usage, provides partial funding to 2 Project farmers to construct new cattle sheds with provision to collect the manure.</li> </ul>
TSAEE	<p><u><i>Increases in Organizational Networks and Operating Budget</i></u></p> <ul style="list-style-type: none"> <li>• TSAEE provided capacity training in Mobilization (constitutional review, benefits of TSAEE membership, etc.) that has motivated the formation of all new branch offices. TSAEE LZCOM then facilitated the inauguration of new offices with additional training in proposal writing workshops. This ensured that branch members have the ability to develop and access active sources for the application of their skills in the field.</li> <li>• In new branch office projects, TSAEE LZCOM provides guidance in proposal development and shares portions of project management responsibility to ensure that the initial project is delivered smoothly. Through this process TSAEE expanded its base of relationship to active working projects with partners and donors, both nationally and internationally, in multiple projects throughout 2006-11.</li> </ul> <p><u><i>Increases in Membership and Geographic Reach</i></u></p> <p>In total, as a result of capacity building at the branch office level throughout the duration of the project, TSAEE Lake Zone at Misungwi has:</p> <ul style="list-style-type: none"> <li>• Increased active TSAEE membership from 116 in 2006 to 294 (68 female [23%], 226 male [77%]) in 2011</li> <li>• Increased active branches from 5 (Misungwi, Magu, Ukerewe, Geita, Mwanza City) in 2006 to 12 (Lake Zone: Misungwi, Magu, Ukerewe, Geita, Mwanza City, Sengerema, Tarime, Bariadi/Maswa, Meatu; Western Zone: Tabora; Central Zone: Singida) in 2011</li> <li>• Increased active zones of TSAEE from 1 (Lake Zone) in 2006 to 3 (Lake, Western, and Central Zones) in 2011</li> </ul> <p><u><i>Increased Participation of Members in Formal Organization Activities</i></u></p> <p>The TSAEE Lake Zone Coordinating office at Misungwi hosted annual general meetings in 2008, 2009, 2010, 2011 with participants representing each Lake Zone district in attendance. In 2010, the Lake Zone AGM hosted additional representatives from the Western Zone (2 male) at Tabora and Central Zone at Singida (1 female, 1 male). In 2011, the Lake Zone AGM hosted representatives from the Western Zone (1 male) and Eastern Zone (3 male).</p> <p>Through AGM participation TSAEE members in the Lake Zone have:</p> <ul style="list-style-type: none"> <li>• Identified Organizational Assessment and Strategic Planning priorities</li> <li>• Adopted Vision and Mission statements</li> <li>• Fostered succession planning through active member participation that allows for the identification of motivated members in future positions of leadership</li> </ul>

	<ul style="list-style-type: none"> <li>• Dialogued directly with the TZ Ministry of Agriculture</li> <li>• Initiated processes to revitalize TSAEE nationally.</li> </ul>
VIETCANSOL	<ul style="list-style-type: none"> <li>• Land is allocated to farmers, especially those in the mountainous remote areas, according to Vietnam’s Government Land Law. Farmers hold land title (there are names of both husband and wife, and land title for female headed- households by government law), but the lands are largely degraded and limited in agricultural productivity. The project supported local owners in applying innovative land and crop management by using biology and composted local organic resource technologies, and agricultural production technologies to increase soil fertility, crop yield and improve the value of their land through sustainable land management.</li> <li>• Local capacity building through training, field visit and field days for farmers and the participation of NGOs and CBOs at various stages of the project will ensure that results will continue to be felt after the project is completed. Establishing networks among local, regional, and national agricultural extension agencies, NGOs, CBOs and farmers supported interchange and support among these groups and ensured wider application of project results over time.</li> </ul>

**Involvement of other government departments, agencies, organizations or institutions and their demonstrated commitment**

Key relationships have developed over the life of the project between overseas scientific societies/partner organizations within project countries and government departments, agencies, organizations and institutions operating within those same countries. These partnerships, both formal and informal, have resulted in synergies in working with rural beneficiaries. They were developed through government representatives’ attendance at annual meetings, workshops and seminars, sending communiqués and reports to government officials, and dialoguing with government officials on policies.

One significant area of sustainability is demonstrated through government recognition of scientific societies/partner organizations as competent and valuable partners in the rural development/agricultural sphere and government-funded agriculture institutes partnering with SPOs in working with rural beneficiaries. Another key area of sustainable development has been achieved with SPOs in supporting the capacity of government agricultural extension services. This has been achieved through the provision of training/skills development to extension employees, transfer of technologies, development of beneficial management practices in association with farmers, and incorporation of gender equality focus in working with farmers.

SPOs were recognized by their governments as important partners in achieving objectives of country development programs. The Ghana Society of Animal Production was acknowledged for its contributions to Ghana’s Food and Agriculture Sector Development Program (FASDEP II). In Vietnam, the work of the Soils and Fertilizer Research Institute holds official recognition by the

Ministry of Agriculture and Rural Development. Such acknowledgements favour the sustainability of results at the community level through incorporation of SPOs endeavours into on-going government programs.

A third area of sustainability has been achieved through partnerships with non-governmental organizations working in the same contexts/regions as SPOs. This has led to synergies in working with rural beneficiaries in areas of technical skill transfer, in group and community mobilization, marketing and micro-credit development.

A fourth area of sustainability has been in SPOs developing memorandums of understanding with partner organizations, NGOs and institutes for mutual benefit. Continued collaboration with government departments and agencies was assured through the signing of memoranda of understanding formalizing the dissemination of the technologies developed through the ITTP as an integral part of their official mandates.

Specific examples include:

ETCANSOL	<ul style="list-style-type: none"> <li>• ESSS has taken steps to link to existing organizations (e.g. universities, federal and regional research institutes, regional bureaus) and projects (Sustainable Land Management Platform, Agricultural Growth Program, Growth and Transformation Plan, Alliance for Green Revolution in Africa). These organizations are purely the beneficiaries of the ESSS products, while implementing their program and projects at end user level.</li> <li>• Results are highly relevant to current emerging programs and policies of the government of Ethiopia.</li> <li>• Through the project, new and strong partnerships have been developed with the Agricultural extension services and the SLM national program</li> <li>• ESSS organized and hosted three national workshops:             <ul style="list-style-type: none"> <li>- 2009: “Improved Natural Resource Management for Food Security, Poverty Reduction and Sustainable Development”. The goal of this workshop was to catalogue soil, water, climate and agroforestry research findings and to establish a base from which to develop and disseminate appropriate information to farmers, extension officers and policy makers.</li> <li>- 2010: Extension focused workshop to identify the extension needs for soil and resource information, and packaging and delivery for farm level use. The workshop examined the potentially competing demands of food security and natural resources degradation, and the importance of establishing entry points within the extension system.</li> <li>- 2011: “Natural Resource Management for Climate Change Adaptation”. The workshop contributed to establishing a consolidated information base to assist in mitigating effects of climate change and to develop a road map for adapting to climate change and sustainable economic development.</li> </ul> </li> </ul>
GhIH	GhIH partnered with several organizations and departments to implement the

	<p>project, including:</p> <ul style="list-style-type: none"> <li>• MoFA</li> <li>• Public Universities</li> <li>• WIENCO</li> <li>• MIDA</li> <li>• ADRA</li> <li>• Plan Ghana</li> <li>• Cocoa Research Institute</li> <li>• SARI</li> <li>• Second cycle educational institutions</li> </ul> <p>GhIH also developed sponsorships for AGM, Newsletters and national lectures and has been successful submitting proposals for consultancies.</p>
GSAP	<p>Animal Production Directorate</p> <ul style="list-style-type: none"> <li>• Selected and managed Sahelian goats for the dairy project</li> <li>• Provided technical backstopping in livestock farming</li> <li>• Provided vehicle for use of PCC</li> <li>• APD committed to provide technical backstopping and management of goats in the next project phase.</li> </ul> <p>District Agricultural Development Units (DADU) in Bole, West Mamprusi, Sawla-Tuna-Kalba, Lawra and Jirapa-Lambussie Districts</p> <ul style="list-style-type: none"> <li>• Transferred environmentally sustainable and economically viable technologies to enhance shea nut and livestock production.</li> <li>• Managed project animals in the beneficiary communities</li> <li>• Vaccinated poultry and small ruminants</li> <li>• Trained women in cross-cutting issues</li> <li>• Trained women in group dynamics, record keeping and general farm management</li> <li>• DADUs committed to all activities in the next project phase.</li> </ul> <p>Animal Research Institute</p> <ul style="list-style-type: none"> <li>• Provided office facilities for PCC and Field Implementation Team (FIT)</li> <li>• Provided vehicle for use of FIT</li> <li>• Cultivated and managed high quality forage legumes to mitigate the effects of climate change</li> <li>• ARI committed to carry out all activities in the next project phase.</li> </ul> <p>JAKSALLY Youth Group</p> <ul style="list-style-type: none"> <li>• Assisted women groups to process and market their shea products</li> <li>• JAKSALLY committed to assist women groups in the next project phase</li> </ul> <p>Northern Empowerment Association (NORDESO)</p> <ul style="list-style-type: none"> <li>• Managed micro-credit facilities for women groups in the West Mamprusi District</li> <li>• Trained women in group dynamics</li> <li>• Implemented the cost recovery programmes</li> </ul>

	<ul style="list-style-type: none"> <li>• Assisted women groups to process and market their shea products</li> <li>• NORDESO committed to carry out all activities in the next project phase</li> </ul> <p>Rural Women Emancipation Foundation (RWEF)</p> <ul style="list-style-type: none"> <li>• Managed micro-credit facilities for groups in the Lawra district</li> <li>• Trained women in group dynamics</li> <li>• Implemented the cost recovery programmes</li> <li>• Assisted women groups to process and market of their shea products</li> <li>• RWEF committed to carry out all activities in the next project phase</li> </ul> <p>Kwame Nkrumah University of Science and Technology (KNUST)</p> <ul style="list-style-type: none"> <li>• Provided office facilities for the Editorial Board of the Ghanaian Journal of Animal science</li> <li>• KNUST committed to provide facilities in the next project phase</li> </ul> <p>Bridges of Hope (Canada) and Ørskov Foundation</p> <ul style="list-style-type: none"> <li>• Donated funds for non-ITPP activities related to micro-credit scheme and procurement of goats</li> </ul> <p>District Assemblies</p> <ul style="list-style-type: none"> <li>• Provide political backing to programmes</li> </ul> <p>Traditional Heads</p> <ul style="list-style-type: none"> <li>• Provided moral and community support to programmes</li> <li>• Traditional Heads committed to provide support in the next project phase</li> </ul>
SADP Nepal	<p>SADP is well recognized as strong professional agricultural organization which helped them to attract and sign agreements with IAAS, SAS-N, NHS and local government departments to collaborate on programs and activities.</p>
SRICANSOL	<p>Following government departments and agencies were partners of the implementation programme and directly involved in project activities.</p> <ol style="list-style-type: none"> <li>a) Department of Agriculture</li> <li>b) Department of Export Agriculture</li> <li>c) University of Peradeniya</li> <li>d) Department of Agrarian Development</li> <li>e) Provincial Department of Agriculture (Central, North Central and Western)</li> <li>f) Mahaweli Authority of Sri Lanka</li> <li>g) Provincial Department of Animal Production and Health (Central Province)</li> <li>h) Department of Irrigation</li> <li>i) Provincial Department of Health, Polonnaruwa</li> </ol> <ul style="list-style-type: none"> <li>• SRICANSOL II developed a “systems” approach to implementing project activities: strategically identified all agencies and brought together soil scientists, water engineers, health professionals, academics and social scientists to address common issues of land use, productivity, health and nutrition (poverty and hunger) for many rural poor farmers in some of</li> </ul>

the major agricultural cropping systems in Sri Lanka. Significant in-kind support was leveraged from other agencies and institutes. The concept, approach and methodology were widely accepted as a model for future endeavours in soils and water conservation actions.

- Presentations made to high level policy makers on the project activities and the effect of BMPs to increase productivity of crops and improve quality of the environment. These included annual presentations to Disciplinary working group meetings of the DoA, articles on project activities, outcomes and achievements presented in the annual Administration Report of the DoA; presentation of project findings to the District Agriculture Committee in Kandy (this is the highest policy-making decision body at the district level where all policy makers, extension officers, research scientists and others are present).
- The policy makers and decision makers of these organizations have taken the project activity as their programme and advised field extension officers to give fullest corporation in all the project related activities. They have arranged field demonstration sites in consultation with farmer groups, frequently visiting demonstration sites and attending day to day activities / instruction, arranging training programmes with farmers and field days. In turn, the project has given training for field officers on BMPs. They have also, further developed the extension materials (leaflets, folders etc.) given to them.
- The MOU signed with the DOA has provided the officers (in research institutes and field extension officers and workers) to carry out project activities without any restriction.
- Institutions such as RRD, HORDI, NRM DOEA and University Laboratories provided the analytical facilities, and GIS mapping. DOA, DOEA University of Peradeniya provided resource persons for training programmes.
- The Central Province DAP & H convinced with the outcomes of Project activities conducted in Neelawala (Project study site) has included the village in their programme to expand cattle rearing, construct cattle sheds and thereby promote compost production. Hence, Neelawala farmers will benefit under this scheme in the coming years.
- Irrigation Department and Mahaweli Authority especially assisted by providing water issues without interrupting to carry out the demonstrations.
- SSSSL is reputed for its expertise in resource management issues and is consulted frequently to solve soil and water quality related issues in the agriculture sector such as:
  - (a) Society is consulted on soil problems in new settlements
  - (b) Health sector request to address the problem of kidney diseases common among farm families in the dry zone.
- Officials of the Department of Health provided the information related to Unidentified Chronic Kidney Diseases.



TSAEE	<ul style="list-style-type: none"> <li>• The increased visibility of TSAEE through effective participation in planning at local government and international NGO levels has further resulted in the recognition of TSAEE in the Lake Zone as a valued actor in life improvement through agriculture at the national government level.</li> <li>• At the TSAEE Lake Zone AGM in 2009, TSAEE Lake Zone at Misungwi was invited by the Minister of Agriculture to prepare a paper with strategies to improve agriculture in the Lake Zone.</li> <li>• At the TSAEE Lake LZ AGM in 2010, this report was presented to the Ministry of Agriculture as represented by the Assistant Director of Extension. In 2010, the Ministry of Agriculture has called on TSAEE to reform as an active national organization based on the TSAEE Lake Zone model.</li> <li>• At the TSAEE Lake Zone AGM in 2011, the support of the Ministry of Agriculture was further evidenced by the participation of a senior national extension officer and the return of the Assistant Director of Extension.</li> </ul>
VIETCANSOL	<ul style="list-style-type: none"> <li>• The Government of Vietnam supported work of this nature through official recognition of the SFRI by the Ministry of Agriculture and Rural Development (whose decision it was to establish this Institute). The Government also carries out infrastructure projects (e.g., roads, electricity, schools), and offers material support in mountainous areas of north and central Vietnam for economic development.</li> <li>• Eight NISF members participated in a scientific meeting organized by the Vietnam Academy of Agricultural Science and the Scientific Committee in the MARDC designed to establish and revise mechanisms on fertilizer management, agricultural land management, and support to farmers to develop and apply new technologies in agricultural production. Contributed to decision-making that will help determine the direction in development of agriculture in Vietnam, particularly in poor, northern regions with hilly farmland.</li> </ul>

**Skills, contacts or resources which beneficiaries acquired to sustain results at the individual and community level (evidence of increased self reliance)**

Increased self-reliance of rural beneficiaries is one of the indicators of increased sustainability. This is observed by farmers’ willingness to participate in community training events and on-farm participatory demonstrations on a voluntary basis. This is evidenced by farmers undertaking beneficial management practices as a result of the training and field support. It is also visible through improved record-keeping and marketing practices.

In some project sites, rural beneficiaries expanded their operations to include new agricultural and processing activities/technologies that are focused on being productive and profitable in the marketplace. This practice of diversification for improved stability and resilience in both agricultural production and income generating opportunities throughout the duration of the



project has been demonstrated in participant reports of increased income generating practices. This mindset of diversification is a result which will endure beyond this project.

Some beneficiaries identified that education and housing were spending priorities for the income earned from agricultural activities. The sustainability of increased educational opportunities for children and spouses and improved housing is a result which will endure beyond this project.

Rural beneficiaries have formed into groups through mobilization, training, mentoring and assistance with group formation. This has led to sustainability of groups and activities through local leadership development which will continue to guide agricultural initiatives after the project is completed.

The expanded networks in which rural beneficiaries have participated can lead to long-term support and connections for ongoing agricultural and rural development from government, organizations and institutions other than the SPOs. This includes ongoing support from government extension services. In some cases, SPO implementation models have been adopted by other agencies as being effective in building sustainability.

Specific examples include:

GhIH	<ul style="list-style-type: none"> <li>• Capacity building on BMPs</li> <li>• Supply of improved seeds</li> <li>• Allocation of community land for the project</li> <li>• Acquisition of fencing materials</li> <li>• Active participation in training at little cost to the project</li> <li>• Active mobilization of community members at no cost to the project</li> <li>• Willingness to provide labour and other resources for the construction of wells</li> </ul>
GSAP	<p>Skills acquired by the women’s groups include:</p> <ul style="list-style-type: none"> <li>• Group dynamics</li> <li>• Shared group responsibilities</li> <li>• Improved livestock production practices</li> <li>• Improved vegetable production practices</li> <li>• Mechanised shea butter processing</li> </ul>
SRICANSOL	<ul style="list-style-type: none"> <li>• The holistic approach, project activities and protocols developed by the project have been adopted by government departments/ collaborating organizations</li> <li>• Repeated demonstrations of BMPs have helped to improve farmer skills. Considering crop yields and soil fertility limitations, BMPs were developed and introduced on short and long term basis and implemented in the most representative fields in each study site with farmer participation. A BMP package of practices for each site was developed.</li> <li>• Ginger and turmeric seed tubers were provided by the project initially to only 4 farmers. Traditional ginger yields 15-20 t/ha but new improved varieties gave yields of 30-35 t/ha. Average cultivation extents in home</li> </ul>

	<p>gardens is about 100 m<sup>2</sup> and tuber yield increased from 150-200 kg to 300-350 kg. Income increased from Rs. 30,000-40,000 to Rs. 60,000-70,000. As a result of this increase, the cultivation of both crops rapidly expanded in demonstration villages. The demonstration farmers use a portion of the harvest from the previous crop as seed tubers for the next crop and sell the rest to other farmers.</p> <ul style="list-style-type: none"> <li>• Continuously working with farmers for 5 years and arranging visits to Research Institutes (RRDI, HORDI etc.) helped farmers to establish close contacts with government officers and also improve their knowledge and confidence (all sites).</li> <li>• The material assistance provided to farmers (ladders, growing structures, paddy husk burners, pruning knives, pitchforks, OK structures) can be used for a long period and help farmers to continue adopting the BMPs.</li> </ul>
TSAEE	<p><u>Skills in Improved Income and Food Security</u></p> <ul style="list-style-type: none"> <li>• 91% of interviewed participants (148/162, 99 female, 49 male) in 14 of 15 interviewed groups identified record keeping and financial management as the most valuable training they have received from TSAEE. Participants commonly describe that prior to the project with TSAEE they had no knowledge in regards to basic record keeping (income, expense and balance) or market function (supply and demand, peak market timing). At the conclusion of the project in 2011, all interviewed groups were able to provide a financial summary of their activities.</li> </ul> <p>Amongst 162 participants in groups willing to describe their current income (2011):</p> <ul style="list-style-type: none"> <li>• 45% (73/162; 56 female, 17male) describe their average monthly income as being between 50-100,000 Tsh/month in 2011 (~\$35.71-\$71.42 Cdn).</li> <li>• 55% (89/162; 52 female, 30 male) describe their average monthly income as being greater than 100,000 Tsh/month (+\$71.42).</li> </ul> <p>While participants stated that the core of the income generating activities were agro-enterprise based and subject to seasonal variability with the arrival of crops, interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) described the consistency of their monthly income as being very stable by the conclusion of the project in 2011.</p> <ul style="list-style-type: none"> <li>• When further asked to describe the resiliency of their monthly income to withstand unforeseen change (unexpected household needs, illness, etc.), interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) stated that their incomes were very resilient.</li> <li>• Further, all participants describe themselves as expanding their operations to include new agricultural activities that are focused to being productive and profitable in the marketplace. This practice of diversification for improved stability and resilience in both agricultural production and income generating opportunities as promoted by TSAEE</li> </ul>

throughout the duration of the project has been demonstrated in participant reports of increased income generating practices.

- All interviewed groups (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) described adding an average of one agricultural stream of income to their practice annually during the period of 2008-10 (additional crop type, livestock, and value added practice) for an increase from 1 stream of agricultural income in 2006 to an average of 3 means of agricultural income generation in 2011.
- Rooms have been included in all modern homes constructed in the project that allow for storage of 1,000 kg (twenty 50 kg bags; ten 100 kg bags) of food crops per home constructed. One female participant in Magu reported that she now maintains a constant supply of rice sufficient for 24 months of food needs in their household.

In 2011 at the conclusion of the project, regardless of variations in food security planning methodologies, location, or gender and age demographics of groups:

- 95% (154/162; 108 female, 46 male) of all surveyed participants describe themselves as having enough food (2-3 meals/day) for 12 months of the year.
- 5% of the remaining participants (8/162; 4 females, 4 males) describing themselves as food insecure (1-2 meals/day) for 2 months of the year at the conclusion of the project, all identified their main spending priorities before food as child education and housing.
- Accepting that the sample of groups is representative, this indicates that all participants in the project possess the ability to attain food security, by a combination of increased food production or ability to purchase, for 12 months of the year.
- The motivation and high value for agro-economic skills gained in the project was further verified in the response of 100% of interviewed participants (162/162; 112 female, 50 male) that they intend to continue their rural enterprise practices indefinitely.
- All interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) reported that they now employ the same agricultural and economic practices they learned in group training with TSAEE amongst their individual households. As well, all interviewed participants describe that they share the benefits of their increased incomes (homes food, education) to improve the lives of their families.
- While all women interviewed did state that they use their funds as they see fit, they consistently noted to the evaluator that they live in Africa and, “When it comes to family there is no mine, there is only ours”. In further descriptions, all women responded that their children come first and while they maintain final say as to how their money will be spent, they do discuss major investment with their spouses in regards to best choices for the family as a whole.
- In this manner, it should be considered that amongst all groups

interviewed, each member represented a single family composed of an average 6.8 people. Provided that the sample of interviewed groups is accepted as representative, it can be estimated that the 287 participants in this project share the benefits of their efforts with an additional 1,951 men, women and children.

- In recognizing the role of women as essential in delivering and implementing agricultural practices, 100% of interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) stated that women are highly valued as land users. This statement was further verified by reports from women in field evaluation sessions that described how they are approached by male counterparts to learn of agricultural techniques in BMP implementation. To quote one woman in Magu, “we are role models now. We even train the men”.
- 73% of interviewed project participants (118/162; 77 female, 41 male) indicated that they have been actively involved in mentoring (physical demonstration of practices) to others within an average radius of 5 km. 9/15 groups interviewed (6/7 Magu groups [ 2 youth]), 1/4 Ukerewe Groups [1youth group]), 2/4 Misungwi groups [1 youth]) have trained a total of 886 individual neighbouring farmers and facilitated the formation of 23 new rural farm groups throughout the full term of the project.

#### Networks and Linkages

- 100% of interviewed participants state that they have access to extension through TSAEE on demand through phone contact and that they are now aware of where and how to access government extension services.
- As a result of facilitated exposure, all interviewed groups in Magu, Ukerewe and Misungwi report that they now regularly attend their annual district agricultural shows (Nane Nane, Saba Saba).
- Groups commonly described that their members have improved status as community leaders as a result of participating in the project. All groups interviewed (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) indicated that they are recognized as an active community body by their village representatives. In 5 of 11 interview sessions in Magu and Ukerewe, elected village representatives were in attendance. In post group evaluation discussions with these village leaders, 100% (5/5) indicated that they support the ongoing activities of women and youth groups in their village as the groups have provided an example to their neighbours in agriculture and life improvement.
- The benefits of group organization resulted in wider cooperation with additional NGO’s that arrive in local village locations. All groups interviewed state that their existence as an organized body facilitated by TSAEE, has allowed them to access additional skills training. In Ukerewe groups formed through TSAEE facilitation have been able to access cooperative programming with VI-Agro forestry of Sweden. In Magu,

	<p>Ukerewe and Misungwi groups supported by TSAEE organization have been able to connect with CARE International for project cooperative skills training in micro-credit management.</p> <ul style="list-style-type: none"> <li>• All women’s groups participating in the project from Misungwi (5/6 groups representing 50 females), have collectively come together to form a Women’s Network Association. This larger organization is composed of member representation from 18 women’s groups in Misungwi who have participated in past projects with TSAEE supported by AICs ITPP projects. As a result of their experience in the increased skills and abilities gained by working cooperatively, these women have identified that creating their own independent organization allows greater networking opportunities amongst themselves while lending further credibility to themselves as a formalized body that is able to access funds from larger traditional lending services.</li> </ul>
VIETCANSOL	<ul style="list-style-type: none"> <li>• Because of changing climate conditions resulting in serious soil water erosion on sloping land, the project applied soil conservation innovation mostly using biological measures, and organic farming to maintain and gradually increase soil fertility, and introduced new high yield crop varieties at the same time using appropriate pest management.</li> <li>• Networks of volunteer farmers were developed to serve as “farmer trainers” and to establish farmer interest groups (30-35 volunteer farmers/village). The participants of each training event included extension agents, researchers, farmers (about 80%) and farmer trainers (about 10-15% of farmer participants including youth and women, about 50% each). The project supported women in these activities with the result that 40-60% of farmer trainers were women.</li> <li>• Farmers’ interest groups were established to organize group meetings, set activity plans, explain new technologies to the group, transfer new technologies to other farmers (farmers interest groups of 3 core villages and 5 satellite villages organized 92 group meetings on exchanging new technologies, establishing workplans and discussing problems in agriculture production).</li> <li>• Volunteer farmers gained improved knowledge and skills in new agricultural production and land use technologies, as well as communication skills to explain these technologies to other farmers. Project results, new production and land management technologies were transferred quickly to farmers of project villages as well as to other villages and communes.</li> <li>• Every quarter, village women’s associations and NISF organized meetings to discuss interests and problems of women in agricultural production. On the basis of the results of the meetings, NISF and the women’s associations defined the follow-up activities.</li> </ul>

## **Most sustainable outcomes from the project**

The most sustainable outcomes include some which have benefitted the SPOs and some which have benefitted rural beneficiaries. In most cases, the sustainability is because of investment in people's knowledge and processes through a recognition and appreciation by SPOs of context-specific needs and differences at the grass roots. Outcomes that are most sustainable have tended to be low cost and primarily dependent on knowledge and skills acquired from the project, local inputs and resources.

On a practical level, food security and increased income have been achieved and measured in most projects and the capacity to sustain this is strong.

Equally important, the gained understanding of gender equality mainstreaming within SPOs and CPOs, amongst rural stakeholders, and within AIC has led to increased sustainability in recognition and involvement of female members and beneficiaries in all facets of the program.

For AIC, the most sustainable outcomes are the relationships established among project coordinating committee members and the organization itself. From 2006 to 2011, Canadian partners donated over \$1.4M Canadian of In Kind contributions and overseas (Southern) partners donated over \$3.5M Canadian of In Kind contributions. Based on this level of volunteer input, it is a strong assumption that relationships and some level of activity will continue.

These speak to the overall goals of AIC's broader International Agricultural Development Program, (IADP) which have been met through participation in the ITPP:

1. Through facilitation of long term partnerships of member organizations in Canada and overseas, strengthen both partner institutions so they can be more effective in increasing food production, alleviating poverty, improving the environment, achieving greater equality between men and women and increasing their capacity for full participatory decision making.
2. Optimize the engagement and volunteer involvement of AIC individual and organizational members, through participatory, consultative partnerships with beneficiaries, to utilize their skills, knowledge and expertise in international agricultural development initiatives.
3. Provide AIC individual members, both women and men, with volunteer opportunities for professional and personal involvement in international development.
4. Increase global visibility of AIC, its members and projects within the international agricultural development community.
5. Increase AIC board, staff, members and general public awareness and broaden their knowledge of international development issues, agriculture and science.

Specific examples for SPOs include:

ETCANSOL	ESSS has learned that to be effective in the chain of information transfer, it must extend its arm down to the “grass roots”. This was not a common understanding previously.
GhIH	All the outcomes (see RBM Performance report) are sustainable but for food security to be sustainable in the long term, the issue of climate change needs to be comprehensively addressed.
GSAP	<ul style="list-style-type: none"> <li>• Rural household income increased.</li> <li>• Successful environmentally sustainable agricultural practices are implemented.</li> <li>• Women are active participants and beneficiaries of agricultural endeavours.</li> <li>• Improved gender equality</li> </ul>
SRICANSOL	<p><i>Organization level</i></p> <ul style="list-style-type: none"> <li>• Links established with all stakeholders</li> <li>• Developed credibility of the SSSSL</li> <li>• Knowledge, skills and leadership qualities gained by Project team</li> <li>• MOU with DOA and UOP</li> </ul> <p><i>Community Level</i></p> <ul style="list-style-type: none"> <li>• All BMPs introduced.</li> <li>• Material assistance (equipment)</li> </ul>
TSAEE	<p><b>Rural Beneficiary</b></p> <p><u>Financial Skill Use</u></p> <ul style="list-style-type: none"> <li>• 91% of interviewed participants (148/162, 99 female, 49 male) in 14 of 15 interviewed groups identified record keeping and financial management as the most valuable training they received from TSAEE. Participants commonly describe that prior to the project with TSAEE they had no knowledge in regards to basic record keeping (income, expense and balance) or market function (supply and demand, peak market timing).</li> </ul> <p><u>Rural Agro-Entrepreneurship</u></p> <ul style="list-style-type: none"> <li>• Amongst all surveyed groups in Magu, Ukerewe and Misungwi (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) individual members indicated that they employ combined practices of improved production techniques, harvest management, and market timing in their individual household farms.</li> <li>• All participants describe themselves as being able to expand their operations to include new agricultural activities that are focused to being productive and profitable in the marketplace. This has been demonstrated in the reports amongst all groups of adding an average of one agricultural stream of income to their practice annually during the period of 2008-10 (additional crop type, livestock, and value added practice) for an increase from 1 stream of agricultural income in 2006 to</li> </ul>



an average of 3 means of agricultural income generation in 2011.

#### Food Security

In 2011 at the conclusion of the project, regardless of variations in food security planning methodologies or the location of groups:

- 95% (154/162; 108 female, 46 male) of all surveyed participants describe themselves as having enough food (2-3 meals/day) for 12 months of the year.
- Of the remaining 5% (8/162; 4 females, 4 males) of participants describing themselves as food insecure (1-2 meals/day) for 2 months of the year at the conclusion of the project, all identified their main spending priorities before food as the securing of child education and housing.
- Accepting that the sample of groups is representative, this indicates that all participants in the project possess the ability to attain food security, by a combination of increased food production or ability to purchase, for 12 months of the year.

#### **Organizational**

##### Record Keeping

- In addition to workshop training delivered by TSAEE Lake LZCOM members, this project also supported professional development via distance education at Assiniboine Community College in Brandon, Manitoba, Canada in 2009-10 for one TSAEE member (female, TSAEE LZCOM Treasurer Mary Sayi) for credited study in the use of Microsoft Excel. The result of this training has been an improved use of Excel in financial reporting in the ITPP project that has been recognized by other international development agencies – that fosters wider relationships with multiple project partners nationally and internationally.
- In the presentation of financial reporting practices as delivered in the ITPP project, Oxfam Great Britain has asked TSAEE to implement the same financial practices in reporting to their TASU – Improved Poultry project with TSAEE.

##### Leadership Structure at the District/Branch Level

- Ownership of the organization amongst members is very high due to the formalized process wherein leadership (Chair, Vice, Secretary, Treasurer) is elected by members within their immediate daily realm of operation. By this process members are readily able to identify and express their needs and hold to account those in positions of authority with immediacy.
- As well, the formalized structuring of the organization beginning at the branch level fostered greater opportunity for members to constructively participate in processes such as AGMs in the Lake Zone. This makes the organization at higher levels responsive and reflective of member identified priorities.
- As a result of improved capacity in project development and



	<p>management, TSAEE in the Lake Zone increased its annual budget from \$60,000 Cdn in 2006 to \$242,142 Cdn in 2011. Continuing expansion and growth of the organization will require the greater building of capacity in project management throughout branches in order to facilitate viable and sustainable processes for maintaining larger annual budgets. This includes (i) streamlined and efficient processes in monitoring and evaluation (ii) mechanisms that decentralize financial reporting while maintaining fiscal accountability and integrity. Both of these needs have been identified by TSAEE LZCOM as priority areas of capacity building in new and existing branches.</p>
VIETCANSOL	<ul style="list-style-type: none"> <li>• To achieve increased food security and food access for poor communities, the project helped farmers to apply new agriculture production and land management technologies to increase crop yields and agriculture products that contributed to increased food security and food access for poor communities.</li> <li>• Successful environmentally sustainable agricultural practices were expressed by the number of farmer households that applied new technologies, crop yield increase and the number of villages participating in the project that improved soil fertility.</li> <li>• The project organized professional training, seminars, professional exchanges, village level meetings, FPR, field days with participation of PCA and supported PCA in writing reports and scientific papers with the aim to be strong professional agricultural organizations having a positive impact on national regulatory frameworks. Over the five years of the project term, the project organized 10 professional training courses, 4 scientific seminars and 5 professional exchanges with participation of 60 members of PCA (38 male, 22 female), and 60 members of SFRI (30 male, 30 female). Owing to PCA capacity improvement, members of PCA could guide and transfer new technologies clearly. Over the five years of the project term, PCA guided and transferred 38 technologies to farmers and organized 350 training courses, field days, FPR and reporting on FPR and project results to farmers. The project also developed collaboration between other research centers and institute (SFRI) members of the project team to apply and disseminate new technologies. After that they will apply the knowledge learned in the project activities and research. (Collaboration between SFRI, district extension agencies, communes, villages, Maize Research Institute, Animal Husbandry Research Institute, Agricultural University No 1 and Tuber Crop Research Center to consult, train, and transfer new technology and new varieties to the farmers).</li> <li>• The project improved capacity of staff of SFRI through project activities, FPR, professional exchanges (professional exchanges with scientific staff of Canada, Sri Lanka, Ethiopia and Agricultural Forestry Scientific Research and Technology Development Center of Hue University to share experiences in land management, project organization and management and professional exchange with scientific staff of other research institutes</li> </ul>

	<p>through workshops, research and exchange visits) to have a positive impact on national regulatory frameworks. PCA participated in the scientific meeting organized by the Vietnam Academy of Agricultural Science (VAAS) and the Scientific Committee of MARD; 8 staff of SFI participated on the Scientific Committee of MARD to establish and revise mechanism on fertilizer management, agricultural land management, on scientific activity management, on support to farmers to develop and apply new technologies in agricultural production. PCA contributed to decision making (policy makers) that will help decide the direction in development of agriculture and promote the adoption of appropriate technologies by farmers, especially ethnic group farmers.</p> <ul style="list-style-type: none"> <li>• The project provided opportunities for women to directly participate and benefit in farmer participatory research and other project activities to improve their capacity and income. Participating in project activities and FPR increased the capacity of women’s associations in leading women’s groups to apply new technologies with the aim to increase crop yield and reduce the number of poor women.</li> </ul>
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**Least sustainable outcomes**

The least sustainable outcomes affecting partner organizations were identified as those which relied heavily on external funding, technology and expertise. The impact of climate change and domestic inflation rates could negatively impact the sustainability of some program results in future. The impact of climate change on women will exacerbate any existing inequalities in project locations.

For AIC, the least sustainable outcomes relate to membership and funding. The ITPP is reliant on external funding to maintain the level of activity and results experienced over the past five years. Involvement of members in the ITPP has risen and an increasing number of new members have become actively engaged. However, the organization has seen overall declining individual membership since 2006 partially due to an aging membership. Recommendations in the organizational assessment of 2006 identified the need for youth internships to recruit new, younger members. A task force was struck in 2010 and will be presenting recommendations at the 2011 AGM on how to address declining membership. Financially AIC does not have the level of funding needed to implement a program the size of the ITPP. Without funding for staff, activities would have to remain at the level of volunteer capacity. Travel would be dependent on individuals bearing the cost personally which would severely limit professional exchanges. Activities in the project country would depend on funding from other sources and Canadian professional support by e-mail and Skype.

Specific examples for SPOs include:

ETCANSOL	The ESSS would find it very challenging to sustain the result accumulated if the ETCANSOL project would terminate at this time. These days, civic societies, like ESSS are declining in performance, mainly due to the fact that both the ExCo and
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	<p>the entire membership are tightly scheduled in their business (change in life style) and therefore, running the societal activities on a routine basis is becoming an insurmountable challenge. Even some of the ex-presidents of ESSS have doubt, if ESSS is a living entity. It is the middle of this challenge that ESSS is performing. In order to address this issue, employing one project manager, who is technically capable and rich in proposal writing skill should be in place, so that he/she employs him/herself and also contribute to the financial sources of ESSS. The development of SPM/guideline is one road that will get us there. Without support and sponsorship from ETCANSOL it was difficult to undertake workshops, given the challenges of fund raising in the contemporary situation in Ethiopia.</p>
GHIH	<p>For food security to be sustainable in the long term, the issue of climate change needs to be comprehensively addressed.</p>
SRICANSOL	<p><i>Organization Level</i></p> <ul style="list-style-type: none"> <li>• Publications (Journals, books and other publications) because of the high printing cost.</li> </ul> <p><i>Community Level</i></p> <ul style="list-style-type: none"> <li>• Need to develop technologies for climate change conditions</li> </ul>
TSAEE	<p><b>Rural Beneficiary</b>  <u><i>Crop Timing and Planning Strategies due to Climate Change</i></u>          While groups demonstrate a high knowledge in the application of implementing BMP's respondents indicated that the degree to which they felt they possessed the necessary knowledge and skills to meet future environmental challenges as follows:</p> <ul style="list-style-type: none"> <li>• 12% indicated they felt they did <u>not at all</u> have the necessary enviro. skills/knowledge</li> <li>• 73% indicated that felt they <u>somewhat</u> had the necessary enviro. skills/knowledge</li> <li>• 15% indicated they felt they <u>definitely</u> had the necessary enviro. skills/knowledge</li> </ul> <p>In follow-up questions, all interviewed participants (15 of 35 groups accounting for 56% of total project participants [162/287; 112 female, 50 male]) indicated that although they knew how to implement beneficial management practices they lacked sufficient knowledge in understanding weather. Common details shared by participants were related to alterations, particularly from 2007 onwards, in traditional rainfall patterns and more extreme fluctuations in drought and flood cycles.</p> <p>While TSAEE has been able to maintain life improvement gains amongst participating groups throughout the full term of the project, an increasing need for short, medium and long term weather and climate planning for effective cropping is an unexpected need that TSAEE LZCOM has identified as a capacity building priority amongst their members.</p> <p>Crop timing and planning strategies as developed throughout the full term of the project will require revision in order to maintain the strength of food security</p>

and economic gains made by participants thus far.

#### Inflation Undermining Economic Gains

When the average 2011 monthly income of individuals in the project is considered as a daily average of 2,000 – 3,333 Tsh/day (\$1.33 - \$2.22 US), it can be stated that 100% of participants in the project have secured incomes high enough to be considered above the international poverty line for least developed countries of \$1.25 US/day (1,875 Tsh).

However, the high fluctuation of currency exchange in Tanzania (in November of 2010 exchange was ~1400 Tsh/\$US compared to the March 2011 exchange of ~1500 Tsh/\$1US) holds the potential to undermine gains by those made to live above the international poverty line.

Additionally, high market fluctuations in local and export market based food prices place the earning potential of participants engaged in rural enterprises that are strictly dependent upon crop and livestock production at risk.

TSAEE mitigated these risks through the promotion of diversification strategies in the promotion of on-farm and off-farm income generating practices amongst participants to cultivate greater household economic resilience through the diversified agro-enterprise portfolios.

#### **Organizational**

##### ICT Use for Inter-Office Communication

- Regional variations in the skills of TSAEE members as facilitators and coordinators were observed through evaluation processes in the use of ICT skills. While training in ICT use has been delivered in Magu, Ukerewe and Tabora the low availability of hardware has been a limiting factor in the application of skills in a tangible manner. Regardless of receiving training, all TSAEE members engaged in evaluation interviews in Magu, Ukerewe, Tabora and Singida (35/35; 7 female [20%], 28 male [80%]) stated that the main skill they lacked was internet use.
- This variability in capacity amongst branch offices in ICT skills and technology access has led to inconsistency in reporting formats (electronic, handwritten) throughout branch offices. Reconciling multiple report formats increases volunteer coordination time in data entry at the TSAEE LZCOM while limiting opportunities to disseminate knowledge, implement the use of greater uniformity in monitoring tools, and engage in responsive processes for richer data analysis that are reflective of capturing the full range of positive results that have been generated throughout the full-term of the project.

##### Project Management

- Continuing expansion and growth of the organization will require the greater building of capacity in project management throughout branches in order to facilitate viable and sustainable processes for maintaining larger annual budgets. This includes (i) streamlined and efficient processes in monitoring and evaluation (ii) mechanisms that decentralize financial reporting while maintaining fiscal accountability and integrity.

	Both of these needs have been identified by TSAEE LZCOM as priority areas of capacity building in new and existing branches.
VIETCANSOL	The least sustainable outcome is outcome 2, because increased household income is dependent on many activities and factors outside of our project objectives and activities.

## **N. Lessons learned in the process of Program implementation**

The following lessons which were learned and reported over the five years of the ITPP cover areas specific to project partners, their membership and other stakeholders, to rural beneficiaries and at the broad program level.

Projects were most effective when they were inclusive, transparent and promoted ownership, and examples below demonstrate the effectiveness of this

implementation approach. This effectiveness was visible through processes which included participatory methodologies, a focus on beneficiary identified needs, and respect for the knowledge and expertise of farmers. The respect and inclusiveness built ownership and commitment from the beneficiaries and from the organizations and their members who were implementing the projects. This strong commitment focused activities and resources on achieving relevant results.

Clearly defined roles and responsibilities enabled faster decision and action with the SPO implementing organization and amongst partners. This was especially important when working with several partners, community organizations and groups. Partners found that role definition helped to promote disciplined, timely and dependable action. It was particularly effective to separate the roles and responsibilities of project implementation from those of organizational management and governance.

Coordination of planning and work with government bodies and organizations at the national, regional and local level was cost effective, levered more resources for the project, coordinated development initiatives and created a sustainable mechanism for providing inputs and support to farmers. It was especially effective when all partners' efforts and inputs were appreciated and acknowledged. This coordination was greatly assisted because national agricultural scientific organizations have members working within a range of agencies, organizations, government and academic and research institutions.

Regular, clear and focused communication was important internationally among Canadian and southern partners and AIC, and both nationally and locally among project stakeholders. Project coordinators found that organizing a range of events was effective to promote beneficial management practices to a range of audiences.

Both SPO and CPO partners grew in their understanding of the need for accurate data to enable them to strategize, plan, measure, assess and evaluate. As project coordinators' understanding and ability grew, a greater emphasis was placed on data collection and monitoring, including data specific to rural beneficiaries and from organizational assessments.

Ensuring access to resources is critical. This includes land rights, quality inputs, necessary labour and sufficient funds or labour to ensure activities are implemented when needed.

Partner organizations learned to focus on their areas of expertise and found it more effective to collaborate with government or non-government organizations that provided complementary assistance such as small producer loans or breeding stock or seeds.

These lessons learned include many good strategies and procedures to incorporate in future projects in the design, methodologies, benchmarking, gathering and analyzing data, critiquing plans and reports organizational structures, and the roles and responsibilities of effective partnerships.

## **PLANNING AND EVALUATION**

### **Identification of Needs**

Lessons learned have a strong emphasis on joint definition of needs in the initial planning stages. For rural/agricultural development, this includes a respect for indigenous knowledge and working in partnership with rural beneficiaries when determining which needs can be realistically and successfully addressed. The needs assessment also takes into account the demographics, skills and abilities of the group and the scientific technology and methods available. The beneficiaries and the scientific society members both have a role in determining how the science can be adapted to the locality and the group to be most successful in meeting the expressed needs.

Relating needs to tangible goals was particularly successful. Tangible goals are easily identified improvements in livelihoods which can also be measurable indicators of larger goals such as food security and poverty alleviation.

<b>Project</b>	<b>Needs Identification Lessons Learned</b>
GSAP	Interventions are more appreciated when the request comes from the beneficiaries than when imposed by donors.
	The facilitation of livestock and poultry health and introduction of various forage legumes for feeding and improved housing management leads to increased productivity and reduced stock mortalities which increases and sustains income.
VIETCANSOL	Farmers are only interested in testing technologies that are clearly superior to what they are doing now. New varieties and other agronomic practices that increase yields are good entry points for the testing and adoption of

	soil conservation practices.
	Let farmers choose, value their knowledge, culture and local expertise. Farmers base their decision about adoption mainly on the potential economic benefits to be obtained.
	Demonstration plots and field experiments conducted in response to farmers' needs received high appreciation and were beneficial to farmers because results can be easily seen and thus farmers have a deeper understanding of the introduced technologies.
Various	Members in zones may have context specific needs that are different from members in other zones (e.g.: university based members needs differ from government or extension based members).
Various	Member engagement and capacity development occurs when members develop projects at the branch level wherein they can apply and develop their abilities.
TSAEE	The achievement of tangible goals (bicycles, housing, school fees) by rural beneficiary groups leads to the achievement of intangible goals such as food security, increased income, and improved gender relationships in households. Assisting groups to focus on tangible goals is an effective extension method for accomplishing life improvement goals that have been identified by beneficiaries for their context specific needs.
	Groups identifying and attaining transportation as an initial tangible goal have been able to access wider markets for greater financial gain.
SRICANSOL	Introduced BMPs should be suitable for that particular site.

### **Strategic Planning and Implementation**

From some of the newer projects, Lessons Learned showed the knowledge they gained in project planning and implementation. Projects were not Canadian led or dictated and in the joint planning, southern partners were sometimes more optimistic about levels of achievement and speed of progress. Newer projects also learned the unique benefit of the two focuses of the ITPP projects – strengthening capacity which included involving members of their organization in activities, and implementing rural/agricultural development projects. Members' involvement in a development project with Canadian partners gave them a great sense of achievement, increased their commitment, attracted new members and advanced the credibility and visibility of the organization.

<b>Project</b>	<b>Strategic Planning and Implementation Lessons Learned</b>
ETCANSOL	More realistic planning and budgeting should have been undertaken earlier in the project.
	ESSS has learned that to be effective in the chain of information transfer, it must extend its arm down to the "grass roots". This was not a common understanding previously.
All Projects	Projects with more experience identified strategies specific to the design and implementation of rural agricultural projects. These are listed below



	under the sections of Rural Beneficiaries, Organization Members and Program. Strategies addressed resilience, appropriateness of design, essential elements to consider in planning, focusing on areas of agricultural expertise, overcoming initial barriers and replication. In some cases, such as replicating methods in other areas, projects have had differing experiences. By sharing lessons learned partners exchanged experiences on the positive and the negative possibilities to consider when planning.
	Lessons learned about involving well placed organization member to provide input to government and to keep the organization abreast of government policies and programs are also a good example for coordinating project goals and activities with those of non government organizations and the private sector.
<i>Rural Beneficiaries</i>	
TSAEE	Those receiving training need a tangible outlet to apply their skills or their ability diminishes and is eventually lost.
	Establishing three streams of income creates a resiliency to risks that is greater than depending on one stream of income.
	Planning should ensure that food production is complemented with practices and other support which will aid people in the times of greatest food shortage. (e.g.: crop storage, diversity of production, off season production).
	Using the same methodology and practices in a new environment will not always be as effective as it was in another environment. The local culture and conditions must be assessed and addressed when determining the approach.
	Ongoing support, although limited, from the SPO to graduated women's groups led to the formation of a women's network association (Muwaviwa).
VIETCANSOL	Appropriate design of land use and crop management at the beginning of the project is very important.
	Establishing farmer interest groups in the project villages hastened the application and transfer of new technology.
SRICANSOL	Land ownership should be considered when implementing project activities. If beneficiaries cannot depend on sustained access to the land they will not have a long term commitment to improving the soil or long term plans to continue farming.
	Introduced BMPs should be low cost and not require expensive inputs.
	To ensure more farmers continue to use BMPs, BMPs should be easy to implement and materials needed should be easily available, low cost and accepted by farmers
	Working with farmers and encouraging participation in project activities is more effective than conducting classroom type sessions to promote a technology.
	An effective design and implementation procedure can be replicated



	within the country and in other countries.
GSAP	An integrated system of several areas of agricultural production ensures greater resilience for farmers. (e.g.: livestock income when crop yields are low and crop income when animal disease devastates).
	Provision of basic needs such as protective clothing against snake bites gives one a sense of health security and significantly enhances output that may lead to increased incomes and improved livelihood.
GSAP & VIETCANSOL	Focussing on women and /or women’s groups specifically increased adoption rates of BMPs such as DSVP (GhIH), sheanut production (GSAP), pig production (VIETCANSOL).
<i>Partner Organizations</i>	
ESSS	The development of the organizational vision, strategic plan and guidelines gave more members confidence in the viability of the organization.
	With many scientific society members working in key government positions, the project can be focused on results that are highly relevant to current and emerging government programs and policies.
TSAEE	The positive results of organizational development due to organizational assessments and strategic plans, demonstrates that planning processes need to be reviewed and revised annually or bi-annually.
	Micro-credit is much easier done by groups who specialize in the service. Project officers should identify sources for agricultural loans to small producers and refer people to them.
	Women in leadership positions throughout the organization influenced the gender sensitivity of their male counterparts while advancing the professional status of women.
	Establishment of a two member (1 M, 1F) gender desk provided a source of gender information to all members.
NISF/VSSS	Working with government can help to change or direct policies to support farmers, especially farmers in remote areas and poor farmers.
GhIH	Even though the scientific Journal sustained membership of GhIH, especially scientists who required it for promotion at work places, there were fewer females than males in the membership of GhIH and fewer females than males presenting scientific articles for publication in the journal. This was due to the low enrollment of females in schooling in science and mathematics, generally in the country. To increase participation of females in scientific societies, the scientific societies need to encourage young women to enroll in science programs and to make careers in agricultural science attractive to young women.
<i>Program Level</i>	
	Appointment of at least one volunteer member from each SPO to the GEM Working Group provided a contact person for promoting gender quality within each organization.

## **PARTICIPATION AND OWNERSHIP**

Lessons learned about participation give great insight to project planning and strategies. They are also a reference of examples for implementing projects. While very time intensive, participatory processes proved exceptionally successful in creating support from stakeholders and commitment from beneficiaries which, together, produced commendable results. Partners found participation effective in needs assessment, planning, monitoring reporting and evaluation. At the program level, SPO and CPO participation and face to face meetings of all partners at IPMs built a team spirit, strengthened a global network of project partners and developed a true ownership of the program which was evidenced by south south electronic communication and professional exchanges.

In addition to ownership, participation provided many opportunities for coordination of activities and plans with government and non government organizations working in the same project area or on the same or similar results in the country. Participation increased efficiency and effectiveness of resources, built capacity and sustainability of activities and support for rural beneficiaries, and it created a wider reach of results.

<b>Project</b>	<b>Participation and Ownership Lessons Learned</b>
<i>Rural Beneficiaries</i>	
SADP-Nepal	Planning and implementation are more effective when they are participatory.
	The participation of communities should not be made mandatory. Community members should be self motivated to engage in the activities that are implemented in the project areas.
VIETCANSOL	The participatory approach assists with proper monitoring and evaluation.
SRICANSOL	All farmers should be treated alike and preferential treatment for selected farmers should be avoided.
GhIH	Farmers were willing to share their experiences on radio, an indication that as recipients of new technology and methods they were also ready, willing and able to impart knowledge to others.
<i>Southern Partner Organizations</i>	
GSAP	Involving members from various member institutions enhances technology transfer and monitoring of field activities.
TSAEE	The Lake Zone Model of revitalizing TSAEE Zones through the capacity building of members at the branch/district level is a successful means of revitalizing organizations from the grassroots, re-engaging multi district zones and the national executive.
ESSS	The establishment of nodes had a very positive influence on membership awareness and willingness to participate in organizational activities; is an effective way of involving more members and delivering new technologies and information to far reaching regions of the country; and allowed the ESSS to communicate with its members at a low cost.
	ESSS members were overstretched trying to meet the needs of the professional society and many initiatives taking place in Ethiopia. ESSS learned to focus on its strengths which were compilation of credible

	science for climate resilient agricultural production drawn from research its members conducted. This is also an area which government has as a priority and therefore can be conducted on during work hours.
GhIH	Increased efficiency in the management of the vegetable production project was achieved by engaging more organization members from the project area which reduced the cost for of travel for members from outside the project area.
<b>Stakeholders</b>	
Various	Partnering with other organizations provides opportunities for: <ul style="list-style-type: none"> <li>• Professional development</li> <li>• Appropriate technology transfer</li> <li>• Increasing international networks</li> <li>• Increasing visibility, credibility and publicity</li> </ul>
TSAEE	By engaging local project officers, they can use cost-efficient motorcycles to travel to project sites rather than four wheeled vehicles.
GSAP	The high turnover rate of key staff working on the project due to transfers can erode confidence and trust building in the partnership of trainers and beneficiaries. Active involvement of subordinate staff in the project activities ensured sustainability.
	Effective linkages, both local and international, enriched human and material resources available to the project.
	Local partnership between the project and NGOs widened the range of project beneficiaries and improved micro-credit management.
GhIH	The collaboration with MoFA and other Community Based Organisations (CBO's) enhanced progress of project objectives.
	It was realised by the management team that it was more cost effective to run the Farmer Field Schools at each location with the selected MoFA extension staffs and farmers who have received training, playing a facilitation role. Partnering with MoFA and NGOs provided the resources the project needed to increase its reach.
GhIH & GSAP	By utilizing networks and relying on project achievements and improved capacities it is possible to make larger changes. [GhIH and GSAP were able to lobby other agricultural-related associations (Ghana Society for Agric Engineering, Entomology Society of Ghana, Crops Science Society of Ghana, Soil Science Society of Ghana and Ghana Association of Agricultural Economists) to start the formation of the Agricultural Institute of Ghana, which will be more effective in lobbying the Government for the improvements in Agriculture. ]
ESSS	Opportunities such as the 2011 AGM which bring expertise from both the social and agricultural sciences together provide an important venue for sharing of perspectives on the implications of enhancing sustainable food and nutrition health for remote poor and disadvantaged rural residents.
SADP-Nepal	Networking with district level offices makes implementing the project activities easier.

SRICANSOL	Extension workers should not be bypassed when conducting project activities. Activities should be conducted in collaboration with them.
VIETCANSOL	Training of a large number of researchers, extension workers and key farmers is crucial for extending the Farmer Participatory Research approach to many sites and for achieving widespread adoption.
	Good collaboration between the project and leaders and staff of relevant agencies/ institutions / other projects helps reduce duplication and increase efficient use of everyone's resources.
	Networking collaboration between the project the Ministry of Agriculture and Rural Development (MARD), Provincial and District agriculture extension agencies, research institutes, commune agriculture extension staff, and local organizations greatly increases the number of people who consult and quickly transfer new technologies and research results.
	Good collaboration between researchers, extension workers and farmers at the target villages of the project promotes more appropriate activities and sustainability of results
<i>Program Level</i>	
	Input of persons at all levels involved in project activities should be appreciated and acknowledged whenever possible in order to ensure the unity and harmony of all.
	Sharing responsibilities for major tasks such as developing the program for the International Partners Meeting, critiquing plans and reports and mainstreaming Gender Equality was an effective method to fully engage and inform partners who, in turn, disseminated skills and information within their organization and partnerships.

### Program Level: South South Exchange

The evaluation of the 2001 to 2006 program recommended more south-south connections and, through a proposal for additional funding, AIC was able to support south-south professional exchanges. Lessons learned from south-south exchanges included methods, tools and knowledge which benefited both rural project participants and organization members.

Project	South-South Exchange Lessons Learned
<i>Rural Beneficiaries</i>	
GhIH & GSAP	South south collaboration enhances and promotes cooperation - small ruminants were introduced to GhIH communities and dry season vegetable cultivation was introduced to GSAP communities. Farmer exposure visits were also organized for the farmers of the two groups so they could learn from each other.
<i>Southern Partners</i>	
GhIH-GSAP-TSAEE	Sharing with other ITPP projects increases awareness of: <ul style="list-style-type: none"> <li>• Project strengths and weaknesses and ways to improve</li> <li>• Alternative extension methodologies</li> </ul>

	<ul style="list-style-type: none"> <li>• Practices for adapting programs to meet needs of physically disabled</li> <li>• Alternative organizational / management structures</li> <li>• Group mobilization</li> <li>• Focus on women and youth</li> <li>• Micro credit development</li> <li>• The tangible goals approach</li> <li>• Livestock and micro credit methods</li> <li>• Tomato harvesting basket design</li> </ul>
	International exchanges increased coordinating capabilities and profile of host organizations. It also provided opportunities for continent perspectives i.e. gender in Africa.
ETCANSOL	South south exchanges gave participants exposure to on the ground projects at the farm level as well as the organization and institutions they worked for/with.
SRICANSOL	South South exchanges gave both parties the opportunity to compare their projects and see similarities and differences of technologies and materials.

### **Implementation: Accountability, Roles and Responsibilities**

Formal Three Party Agreements were of great assistance to explain the responsibility and accountability of each partner, to monitor compliance with agreed to budgets, standards, timelines and expectations, and to reference if a disagreement in responsibilities arose.

All parties benefited from the formal agreements. AIC was ensured that roles, responsibilities and accountability were clearly understood by all parties. The Canadian organizations had a clear understanding of the role and requirements which they committed to and southern partners had full knowledge of their expectations that the project would focus on as well as their responsibility and accountability for implementation, results and funds. This built transparency, especially for the members of the SPO. Beneficiaries had a clear description of the benefits and expectations that would be addressed as well as the commitment and participation required of them. Partners took the same approach with stakeholders developing letters of agreement and memorandum of understanding for their collaboration.

<b>Project</b>	<b>Accountability, Roles and Responsibilities Lessons Learned</b>
GhIH	Each project member had clear descriptions of duties which reduced the burden on the project coordinator.
	The project management team was made distinct from the GhIH executive and so separated its activities from those of GhIH. This allowed the coordinator to respond more quickly and make decisions in a timely manner.
	GhIH consolidated its executive in the middle zone at KNUST and this resulted in a more effective coordination of GhIH activities and its projects.

An elected student group member was made a member of the elected scientific council which created ownership and increased commitment.

### Planning and reporting tools

Based on the success of previous programs, AIC developed and distributed common templates for reporting to project coordinators. This included the financial report in MS Excel, and the narrative, RBM, in-kind and technical cooperation reports, and trip monitoring report in MS Word. All SPO and CPO coordinators were expected to communicate results by e-mail with attachments. Through implementation of this program, partners learned the need for and value of formalizing terms, definitions, procedures and methods. The End of Project report gave partners a series of templates to use in reporting. They learned from using the templates and several partners initiated methods for gathering and recording data to incorporate in reports. From reviewing reports, AIC recognized the need for more standard procedures, and forms for gathering, recording and reporting information.

Project	Planning and Reporting Tools Lessons Learned
GHIH	Reporting in the RBM format became easier as the project management team became familiar with the concept and reporting format.
TSAEE	As a project continues to expand geographically, there is an increased need for standardized reporting tools to facilitate data collection and analysis.
All Projects	SPOs benefitted from the provision of templates and frameworks for reporting and providing input at IPMs and throughout the project.
AIC	The development and provision of templates for reporting provided information in standardized format assisted tremendously in collating information to a program level report. Where templates were not provided, information was reported in various forms some less satisfactory than others.

### Operations and procedures

Project partners reported many effective methods for transferring knowledge and encouraging adoption of new practices. Many lessons learned support the exchange of information from a variety of sources including project officers, government extension agents, organizations and farmers and a combination of group format and individual contact. Consistency of contact and messages has proven most effective. While implementing the projects, partners also learned that skills and knowledge in non-agricultural areas could greatly assist in the adoption of agricultural beneficial management practices. The skill areas that had the most benefit were financial management and analysis, record keeping and group formation, facilitation and dynamics.

Project	Operations and Procedures Lessons Learned
<i>Rural Beneficiaries</i>	
SRICANSOL	Wider distribution of technology can be promoted by encouraging inter-village activities for farmers and encouraging the formation of inter-village

	farmer groups.
	Distribution of technology from farmer to farmer can be promoted by encouraging inter village activities for farmers and encouraging the formation of inter village farmer groups.
	Visits to research institutes helps to widen farmers' knowledge and outlook on new technologies.
	Arranging field days for farmers from different regions gives them an opportunity to exchange ideas and experiences so they can improve their own agricultural practices.
	Disputes among farmers affect project activities. Good group facilitation skills plus clear group structures and strong, democratic governance within groups are required to limit and resolve disputes.
	The team conducting the program should be well disciplined, punctual and dependable in order to get the cooperation and support of farmers.
	Regular Steering Committee meetings and informal consultation through emails and telephone by the steering committee members and Canadian counterparts to take decisions between steering committee meetings keeps project activities and results to schedule.
VIETCANSOL	Seeing the adoption of land and crop management practices in other farmers' fields is more convincing to farmers than listening to researchers or extension workers or visiting researcher managed demonstration plots.
	Demonstration plots and field experiments provided good places for meeting and visiting, enhancing linkages with agriculture officials and extension agents.
	Regular meetings with local associations (women, youth, farmer) were excellent opportunities to exchange experiences in project management, technology application, lessons learned and expected project results.
TSAEE	The Magu Model of a single officer assigned to a group who visited regularly achieved higher results than groups which did not have any specific officer assigned and were visited as officers were available.
	Regional awareness exchanges gave participants new ideas, enthusiasm and encouragement to start new initiatives.
	Youth groups willingly engage in mentorship activities making it an effective method to transfer knowledge and skills.
	Groups display high motivation and adaptability to their rural agro-enterprises when they are equipped with sound financial management skills.
SADP-Nepal	Regular interaction and frequent informal discussion are crucial to motivate community members for their active involvement.
GhIH	Organize field days to quickly exchange experiences in new technology application.
	Running of the Farmer Field Schools at each location with the selected MoFA extension staffs and farmers playing a facilitation role, proved very successful. Organising some of the Training of Trainers workshops at the



	various locations instead of one consistent location, was more convenient and could cater to more participants.
	Farmer to farmer meetings, training and cross farm visits for project and non-project farmers are effective ways to empower farmers and enhance widespread adoption of introduced technologies.
	Training on group formation and dynamics helped most of the farmer groups which were facing difficulties in getting their members together to lobby and negotiate with District Assembly and others for assistance.
	Dialogue is very important in participative technology development, but in many group meetings not every farmer speaks up. This inequality can become a serious group management problem. Good facilitation skills are required to encourage participation from all participants.
<b>Partner Organizations</b>	
GhIH	All members of the project management team were free to reply to mails, circulate information (due to greater transparency and information sharing) so that not only the coordinator was looked upon for information. This reduced the information gap among team members and between partners.
	Results of the various surveys have enhanced the understanding of the management team as to how to be more effective in the delivery of programmes to target groups.
	Rotating the national AGM among the zones has increased participation in geographic regions as it lessened the cost for local members to attend the meeting and conference, and increased the need for local participation to organize the event.
GSAP	Shared group responsibilities, individual commitment and voluntarism were key factors to successful running of the project. No matter what one's commitment was, he/she created time to undertake project duties, even at odd times.
	Regular international teleconference between GSAP and CSAS coordinators enhanced smooth implementation of project activities.
GhIH & GSAP	GhIH working together with GSAP in south-south cooperation shared responsibilities and resources, achieved more, reached more people and cut down costs e.g. organization of workshops, publication of joint communiqués, lobbying the government etc.
TSAEE	Internet Computer Technology training needs to be paired with expectations for increased communication by e-mail, document sharing and decision-making reducing the need to send a TSAEE member in person to meet with the executive committee members.
TSAEE, ESSS, GhIH & GSAP	Team building between all stakeholders, including collegiality, trust and transparency, were prerequisites for effective management of the project. Maintaining effective linkages and communication was also essential. In this regard, frequent use of electronic communication (e-mail chat functions, skype and social networks) and regular teleconferences between project partners enhanced smooth implementation of activities.
ESSS	The project provided opportunities to develop new partnerships with the



	agricultural extension services and the Sustainable Land Management national program.
SADP-Nepal	Timely monitoring of the project also limits the deviation of the project from its purpose and focus on the critical issues to be addressed.
All Projects	End of project reporting was facilitated when CPOs and SPOs scheduled concentrated working periods to analyze data and write the reports.
	Reliable transportation is essential to maintain regular contact with groups.
AIC	At the organizational level the diversity of terms, definitions and ways of presenting information made it difficult for partners to share results and for AIC to collate results at the global level.
	Standardized terms and definitions are essential when sharing information between projects.
	Standard procedures and forms for gathering , recording and reporting information (financial and results) would make it easier to compare and collate results from all projects.
	Agreements between partners clearly outline timelines and reporting responsibilities but timely communication and reminders are necessary to encourage and elicit reports when needed.
<i>Program Level</i>	
	AIC found it most effective to contract consultants on specific topics when the expertise was required. (e.g.: Gender Equality for the GE roundtable discussions and organizational analysis, RBM training)
	As a group, partners, including AIC, learned the benefit of formal processes and formats. These were used very effectively in planning and designing sessions at the IPM, critiquing reports and proposals, engaging in discussions on Gender Equality and Climate Change and in developing the End of Project Report.
	The most effective process for the analysis of results at the end of the project was when both Canadian and southern partner project coordinators met face to face in the project country to review and discuss the data. This brought different perspectives to the analysis and it enabled them to discuss their analysis directly with organizational members and rural beneficiaries and to access hard copy of data.
	AIC was relying on CIDA to contract consultants to conduct a program evaluation so it could incorporate evaluation results and findings into future project plans. AIC learned that it should incorporate plans and a budget for a mid-term evaluation into its project plans to ensure that projects get the information needed to revise plans to be most effective.

**O. Approved Program Budget and actual final budget by line and by fiscal year**

The ITPP Budget and final expenditures is attached as Appendix 1.

**P. How the Organization met its cost sharing obligations**

As keenly observed by one of the ITPP Southern partners, volunteerism is one of the key factors to the successful running of their project. This observation can be extended to embrace the entire Program from the volunteer contributions of Canadian project team members to those of community associations in project sites.

The ITPP exists on the wealth of skills, knowledge and experience of its volunteers in Canada and in each of its project countries. Individuals, and their organizations, freely give of their expertise in fields ranging from livestock management to group facilitation. In return, they gain the opportunity to work in real collaboration with international colleagues in areas that have an impact from household, to community, to national, to global food security. ITPP volunteers come from academia, public service, and the private sector. They are, and have been, leaders in their professions.

Partner organizations, particularly in project countries, contribute facilities, support services, communications, and other material goods. Through their contacts, they are often able to leverage additional project support such as human resources, and other essential services such as transportation.

ITPP volunteers act as coordinators or project team members for individual projects and play various roles in the planning, delivery and monitoring of projects. At the Program level, they participate as members of task teams in areas such as advancing gender equality mainstreaming and developing appropriate program responses to climate change, and contribute to the planning and delivery of major Program events such as the International Partners' Meetings. In professional and community venues, they act as ambassadors of the Program and more broadly of Canada's international development program.

From a core group of approximately 40 coordinators and project team members, there are dozens of volunteers engaged in the ITPP with the scope to draw upon the contributions of many more through organizational memberships and contacts.

AIC has reported in-kind contributions to CIDA regularly through the ITPP quarterly financial reports. Over the five years of the 2006-2011 ITPP, the Canadian partner voluntary contributions of time, services, facilities, and materials has totaled Cdn \$1,512,458, which is 60% of the CIDA contribution of \$2,503,500. Overseas partners have provided the equivalent of Cdn \$3,414,831 in time, services, facilities and materials.

## **Q. Declarations**

An updated declaration on all sources of funding for the Program, and an updated declaration on any overdue amounts owing to Her Majesty are attached as Appendix 5.



*Agricultural Institute of Canada – International Twinning Partnership Program 2006-2011 End of Program Report*

Agricultural Institute of Canada  
International Twinning Partnership Program 2006-2011

End of Program and final reporting period **Jan. 1 - July 31, 2011**

Project Number		End of Program and final reporting period									
S63350		Jan. 1 - July 31, 2011									
LINE ITEMS	Total approved initial budget	Revised budget (June 2010)	Cumulative spending to preceding quarter	Actual cumulative spending	Planned spending for the three month period just ended (Jan 1 - JI 31, 2011)	Actual spent in the three month period just ended (Jan 1 - JI 31, 2011)	Variance between planned and actual	Actual	Actual	Actual	Actual
								Apr-June 2010	July-Sept 2010	Oct-Dec 2010	Jan-July 2011
<b>Direct Program Expenses</b>											
<b>I CDN PROGRAM EXPENSES</b>											
<i>a. Development Roundtables</i>											
Travel/Acc/PD	7,000	2,176	2,176	2,232	0	56	100.00%	0	0	0	56
Facilities	2,000	3,187	3,187	3,221	0	34	100.00%	0	0	0	34
Communications	1,000	0	0	0	0	0	0.00%	0	0	0	0
Supplies	600	111	111	230	0	119	100.00%	0	0	0	119
Professional Fees	6,000	3,000	3,000	3,000	0	0	0.00%	0	0	0	0
<i>b. Dev &amp; Prof Workshops</i>											
Travel/Acc/PD	2,500	15,131	14,843	14,843	0	0	0.00%	6,955	4,500	313	0
Facilities	1,500	2,034	1,364	1,364	0	0	0.00%	0	1,364	0	0
Communications	200	200	0	0	0	0	0.00%	0	0	0	0
Supplies	600	600	362	362	0	0	0.00%	0	362	0	0
Professional Fees	3,500	14,504	14,410	16,010	0	1,600	100.00%	0	1,387	1,119	1,600
<b>Sub-total I Canadian Program Expenses</b>	<b>24,900</b>	<b>40,943</b>	<b>39,453</b>	<b>41,262</b>	<b>0</b>	<b>1,809</b>	<b>100.00%</b>	<b>6,955</b>	<b>7,613</b>	<b>1,432</b>	<b>1,809</b>
<b>II DEVELOPING COUNTRY PROGRAM EXPENSES</b>											
<i>a. Monitoring/Evaluation</i>											
Travel/Acc/PD	70,000	41,311	40,719	43,657	3,500	2,938	16.06%	5,815	1,484	5,109	2,938
<i>b. Task Team Meetings</i>											
Travel/Acc/PD	21,000	23,508	19,213	19,213	0	0	0.00%	0	832	4,373	0
Facilities	6,000	7,115	5,654	5,654	0	0	0.00%	0	0	539	0
Communications	4,000	1,658	1,248	1,248	0	0	0.00%	0	0	0	0
In-kind contribution Canadian time (salaries, prof. fees)	15,000	23,775	29,135	35,035	605	5,900		2,895	3,790	5,675	5,900
<i>c. International Program presentations to Conf./AGMs</i>											
Travel/Acc/PD	7,500	5,879	5,217	5,217	0	0	0.00%	0	1,838	0	0
Communications	4,000	4,315	4,626	4,819	834	193	76.86%	0	853	958	193
Supplies	3,500	3,464	3,582	4,031	250	449	-79.60%	94	694	130	449
Direct Labour Salaries/Benefits	515,023	510,237	466,255	519,170	55,000	52,915	3.79%	28,662	30,064	35,947	52,915
In-kind contribution Canadian time (salaries, prof. fees)	140,000	161,497	194,863	233,195	7,000	38,332		32,033	12,438	16,895	38,332
<i>g. Project-based expenses</i>											
Expended by Projects:											
h. Training & Workshops	290,000	211,577	189,728	199,229	10,500	9,501	9.51%	12,813	13,071	8,067	9,501
i. Networking & Conferences	225,000	244,103	239,554	245,350	11,650	5,796	50.25%	27,203	15,119	8,139	5,796
j. Promotion & Communication	245,000	178,472	168,359	181,899	11,000	13,540	-23.09%	8,481	11,680	12,226	13,540
k. Material Support	195,000	175,572	173,827	178,783	7,000	4,956	29.20%	12,247	7,277	5,701	4,956
l. Professional Exchange	319,345	504,500	479,980	519,904	32,000	39,924	-24.76%	40,941	5,923	1,523	39,924
In-kind contribution Canadian time (salaries, prof. fees)	682,500	958,910	1,033,006	1,148,007	25,000	115,001		96,098	37,313	50,685	115,001
m. Technical Support	160,000	149,474	142,578	148,593	6,500	6,015	7.46%	12,157	8,553	9,294	6,015
n. Applied or Participatory Research	95,000	133,140	110,041	117,239	7,000	7,198	-2.83%	2,467	6,483	2,651	7,198
In-kind contribution facilities/services Cdn	17,500	90,073	93,771	96,221	875	2,450		3,196	1,522	2,480	2,450
<b>Sub-total II Developing Country Expenses</b>	<b>3,015,368</b>	<b>3,428,580</b>	<b>3,401,356</b>	<b>3,706,464</b>	<b>178,714</b>	<b>305,108</b>	<b>-70.72%</b>	<b>285,102</b>	<b>158,934</b>	<b>170,392</b>	<b>305,108</b>
<b>TOTAL DIRECT EXPENSES I + II</b>	<b>3,040,268</b>	<b>3,469,523</b>	<b>3,440,809</b>	<b>3,747,726</b>	<b>178,714</b>	<b>306,917</b>	<b>-72%</b>	<b>292,057</b>	<b>166,547</b>	<b>171,824</b>	<b>306,917</b>
CIDA's share of direct expenses	2,185,268	2,235,268	2,090,034	2,235,268	145,234	145,234	0.00%	157,835	111,484	96,089	145,234
Cdn Organizations share in-kind	855,000	862,500	1,350,775	1,512,458	33,480	161,683		134,222	55,063	75,735	161,683
<b>CIDA overhead allowance</b>	<b>262,232</b>	<b>268,232</b>	<b>254,991</b>	<b>268,232</b>	<b>13,241</b>	<b>13,241</b>	<b>0.00%</b>	<b>13,240</b>	<b>13,240</b>	<b>13,240</b>	<b>13,241</b>
<b>CIDA'S total contribution (to direct expenses &amp; overhead)</b>	<b>2,447,500</b>	<b>2,503,500</b>	<b>2,345,025</b>	<b>2,503,500</b>	<b>158,475</b>	<b>158,475</b>	<b>0.00%</b>	<b>171,075</b>	<b>124,724</b>	<b>109,329</b>	<b>158,475</b>
Costs covered by the developing-country partners' contributions (in-kind)				3,514,831							
Amount of the cumulative expenditures reported above spent on public engagement activities in Canada (note - this figure includes Cdn in-kind time contributed to public engagement activities which are approx. 3% of reported in-kind)				91,853							

**VARIANCE NOTES**

**Ia Development Roundtables and Ib Development & Professional Workshops**

Entries are adjustments from previous years.

**Ila Monitoring/Evaluation Travel**

Costs slightly less than estimated.

**Ild New contract with conference call carrier resulted in lowered costs.**

**Ile Savings in communications supported increased supply costs for printing of project posters for conference presentation.**

**Ili Networking & Conferences**

Savings in N&C supported increased involvement of Canadian Coordinators in process of final report preparation.

**Ilj Promotion & Communication**

Costs incurred for data gathering and analysis for final report higher than estimated.

**Ilk Material Support**

Savings applied to increased involvement of Canadian Coordinators in process of final report preparation.

**III Professional Exchange**

Greater participation of Canadian Coordinators in process of final report preparation than estimated.

**Agricultural Institute of Canada**  
**International Twinning Partnership Program 2006-2011**  
**IN-KIND CONTRIBUTIONS**  
**Reporting Period: End of Program**

IN-KIND CONTRIBUTIONS	Yr 1 2006-07		Yr 2 2007-08		Yr 3 2008-09		Yr 4 2009-10		Yr 5 2010-11		TOTAL ITPP IN-KIND CONTRIBUTIONS		
	Canadian Partner	Overseas Partner	Canadian Partner	Overseas Partner	Canadian Partner	Overseas Partner	Canadian Partner	Overseas Partner	Canadian Partner	Overseas Partner	Canadian Partner	Overseas Partner	TOTAL
<b>Professional Fees</b>													
Task Teams			5,000	0	5,000	0	6,775	11,755	18,260	15,080	35,035	26,835	61,870
<b>Sub-total TT</b>			<b>5,000</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>6,775</b>	<b>11,755</b>	<b>18,260</b>	<b>15,080</b>	<b>35,035</b>	<b>26,835</b>	<b>61,870</b>
Ethiopia	0	0	0	0	84,500	43,500	51,700	71,925	76,500	70,500	212,700	185,925	398,625
Ghana-Horticulture	48,500	61,250	32,750	93,750	11,500	76,625	56,625	150,500	51,470	316,200	200,845	698,325	899,170
Ghana-Livestock	35,500	61,500	50,750	77,000	31,250	70,500	46,235	131,190	27,130	118,280	190,865	458,470	649,335
Sri Lanka	29,000	97,000	47,750	176,000	37,500	358,000	66,000	286,500	68,800	161,500	249,050	1,079,000	1,328,050
Tanzania	37,475	205,500	53,970	102,600	44,750	100,900	96,672	52,250	136,875	113,700	369,742	574,950	944,692
Vietnam	4,000	42,600	11,500	21,880	14,500	7,708	12,000	8,140	6,920	6,662	48,920	86,990	135,910
Global	5,000	0	3,250	0	15,248	0	33,230	2,375	31,100	40,910	87,828	43,285	131,113
South-South	0	0	21,250	64,600	0	0	0	0			21,250	64,600	85,850
<b>Sub-total PF</b>	<b>159,475</b>	<b>467,850</b>	<b>221,220</b>	<b>535,830</b>	<b>239,248</b>	<b>657,233</b>	<b>362,462</b>	<b>702,880</b>	<b>398,795</b>	<b>827,752</b>	<b>1,381,200</b>	<b>3,191,545</b>	<b>4,572,745</b>
<b>Other Facilities &amp; Services</b>													
Ethiopia	0	0	0	0	500	1,031	1,000	310	1,000	73	2,500	1,414	3,914
Ghana-Horticulture	1,010	4,109	1,160	3,119	1,175	6,220	1,155	6,864	870	2,500	5,370	22,812	28,182
Ghana-Livestock	6,420	18,670	10,740	19,880	37,930	27,250	4,962	31,470	3,712	30,000	63,764	127,270	191,034
Sri Lanka	450	15,795	850	12,764	500	37,200	700	18,050	600	9,300	3,100	93,109	96,209
Tanzania	400	2,150	3,846	4,450	385	7,400	897	10,550	2,116	13,500	7,644	38,050	45,694
Vietnam	3,100	3,703	5,900	2,685	2,210	1,950	1,200	1,820	1,200	730	13,610	10,888	24,498
Global	0	0	0	0	0	0	85	0	150	2,908	235	2,908	3,143
<b>Sub-total F&amp;S</b>	<b>11,380</b>	<b>44,427</b>	<b>22,496</b>	<b>42,898</b>	<b>42,700</b>	<b>81,051</b>	<b>9,999</b>	<b>69,064</b>	<b>9,648</b>	<b>59,011</b>	<b>96,223</b>	<b>296,451</b>	<b>392,674</b>
<b>TOTAL</b>	<b>170,855</b>	<b>512,277</b>	<b>248,716</b>	<b>578,728</b>	<b>286,948</b>	<b>738,284</b>	<b>379,236</b>	<b>783,699</b>	<b>426,703</b>	<b>901,843</b>	<b>1,512,458</b>	<b>3,514,831</b>	<b>5,027,289</b>

**Note:** Ghana-L Other Services Cnd contribution includes donation of scientific journals to GSAP library by Dr. Karen Beauchemin (cost of Journals and freight to Ghana)

**Task Teams** include contributions from GEM and ACT2 working group members.

**2001-2006 ITPP EVALUATION  
RECOMMENDATIONS MONITORING  
UPDATED: JUNE 2011**

**APPENDIX 3**

Recommendation	Plan of Action	Target Date	Progress Update
<b>Recommendations from Evaluation Report</b>			
<b>1. Risk management of ASAM-BCIA partnership:</b>			
a) Clarify relationship between BCIA, MUTF and ASAM	Liaison with BCIA, MUTF and ASAM	Done	Lengthy communications with all partners and face-to-face dialogue with the Canadian partners came to the conclusion in May 2006 that a continuing partnership within the current configuration was not feasible. Several factors contributed to this decision, including: very marginal capacity of the Agriculture Scientists Association of Malawi (ASAM) with no leadership figure/body or champion to carry forward their interests; limited sectoral capacity of the Mzuzu University Trust Fund to foster a development process for ASAM and a reluctance to engage with other local expertise to do so; limited capacity within the Canadian organization to contribute to the development process; and geographical considerations and methods of working that significantly increased transportation costs; all resulting in a considerably less developmentally and cost effective project.
b) Do an organizational assessment to assess the needs of ASAM and better target the intervention(s)	Include project in organizational assessment discussion process, and conduct assessment as soon as possible.	End-May, 2006	
c) Establish specific targets	Work with BCIA, MUTF and ASAM in defining realistic targets and establishing annual plans.	With signing of LoA	
d) Ensure regular monitoring by BCIA and/or AIC;  Consider hiring a local consultant to monitor progress and provide technical assistance on organizational development.	Discussions with BCIA on monitoring process	Done	
e) Ensure/demonstrate that the project will be jointly managed by MUTF and ASAM from onset	Develop specifics into annual plan and LoA	With signing of LoA	
f) Provide on-going, targeted organizational development support by	To be determined pending results of organizational assessment.		



Recommendation	Plan of Action	Target Date	Progress Update
BCIA and/or a Malawian based organization, to build management capacity of ASAM and to allow full transfer of coordination responsibility to ASAM by the end of an agreed-upon transition period			
g) Establish a modest SDP component on a pilot basis while ASAM strengthens its organizational capacity.	To be advanced in later stages of agreement.	n/a	Did not proceed. May 2006.
h) ASAM/MUTF demonstrates that the planned SDP activities would focus directly and benefit the farming families of the Project Area, including women.	Results framework, monitoring.	n/a	
<b>2. Strengthen Results Based Management</b>			
- Strengthen reporting on <i>change</i> rather than <i>activities</i> .	Initiate discussion with Project Coordinators, include strengthening Canadian capacity	Done	Review of plans and reports is done on an on-going basis and is part of the monitoring for professional exchange visits. A workshop on "Reporting on Change" was conducted at the 2007 IPM and subsequent plans and reports demonstrated learning from this session. At the 2009 IPM, TPCCC member, Brita Ball, presented a session on collecting and analyzing data to measure results particularly in areas of social development. In addition, the new monitoring template (see Rec 3) helps to focus professional exchange discussions on results.
- Ensure projects have solid indicators and targets.	Review and provide feedback to project frameworks.	Ongoing Done	Done for project proposal frameworks, for annual plans and budgets and for all reports. IP staff review all plans and reports from projects, provide constructive feedback and encourage a dialogue to build results' planning and reporting skills.

Recommendation	Plan of Action	Target Date	Progress Update
<b>3. Formalize monitoring function of professional exchange visits.</b>			
<ul style="list-style-type: none"> <li>- Develop a monitoring template based on the Program planned outcomes and outputs.</li> </ul>	<p>Develop format and test with focus group from selected project coordinators, include recommendations from evaluation, and an audit function</p>	<p>June-August, 2006 Done</p>	<p>A monitoring template was successfully field tested during professional exchange visits to Tanzania in November 06, and Ghana in February 07. By the end of 2007, all projects had used the format. An evaluation with users indicated that the format proved to be very beneficial in focusing exchanges on results. Recommendations from the users for modifications to the format have been incorporated. The updated format continued to be used during all professional exchanges.</p>
<b>4. Better target organizational capacity building efforts</b>			
<ul style="list-style-type: none"> <li>- Overseas partners to conduct organizational diagnosis (self-assessment)</li> </ul>	<p>Access copies of IDRC Self-Assessment publication for all projects.</p> <p>Initiate discussion with Project Coords</p> <p>Conduct Assessments</p>	<p>Done</p>	<p>Resource materials were accessed and distributed to all in July 2006. In addition, multiple copies of CIDA's "Organization Assessment Guide" were obtained and distributed.</p> <p>By the end of the program, all overseas' partner organizations, including the newest partner organizations ESSS and SADP-Nepal, had completed organizational assessments.</p>
<ul style="list-style-type: none"> <li>- Use assessment results as baseline for future interventions; set clear targets; track progress.</li> </ul>	<p>Work with projects on timelines for assessments and incorporating results into project frameworks.</p>	<p>Ongoing</p>	<p>In follow-up, partners worked on incorporating OA recommendations into organizational strategic planning. A "check-in" session on OAs was conducted at the 2009 IPM, with an emphasis on succession planning and organizational sustainability.</p> <p>Examples of incorporating results include: SFI (Vietnam) embarked on a process of developing a ten-year strategic plan. Based on GhIH OA recommendations, the Student Chapter of GhIH has prepared a five-year strategic plan and as well as a Student Guide to regulate their affairs. GSAP revitalized several organizational processes aimed at increasing engagement of membership, particularly students and women. Further results for partner organizations are reported in individual project RBM sections.</p>



Recommendation	Plan of Action	Target Date	Progress Update
			<p>the Gender Equality day of the 2007 IPM, while AIC staff coordinated with external resource people for this event. The day began with a Development Roundtable with presenters from different organizations outlining their experiences addressing gender; this included both development and institutional perspectives. The afternoon session focused on getting inputs on the recommendations prioritized by the GETT: Defining gender equality concepts, scope of work for AIC, as well as better understanding of gender-sensitive indicators. Each of the day's participants received a CD of gender equality resources, and GETT members were tasked with developing a workplan to advance the endeavours.</p> <p>Subsequently sub-committees of the GETT worked on a definition for gender equality within AIC, a description of the scope for gender equality within AIC, and preparation of a gender equality policy for approval by AIC's Board of Directors. The GETT then began work on a strategic framework with gender sensitive indicators. A face-to-face meeting of the GETT took place in 2008 to finalize this work. The GETT was disbanded and replaced by a Gender Equality Mainstreaming (GEM) working group, again consisting of representatives from Canadian and Southern partners, board of directors and staff, which has focused on developing a detailed strategy for mainstreaming Gender Equality in all aspects of AIC's work.</p> <p>The hiring of a (contract) gender equality program officer in 2009 heightened the energy and enthusiasm of gender equality mainstreaming efforts in both developmental and institutional areas. At the 2009 IPM, project coordinators exchanged information on the status of gender-based analysis and training within their organizations and programming and on the availability of in-country funding. In addition, the GEM Committee-International met in person at the 2009 IPM. Guidelines for improved communication were identified and new international members were added to the working group.</p> <p>The GEM produces a monthly newsletter "GEM of the Month" that includes articles of interest, links to helpful resources, and GE updates from partner organizations. The international GEM members are especially active contributors to this resource. A library of gender equality resources has been established on the AIC website and ITPP participants are regularly notified of new additions.</p>

Recommendation	Plan of Action	Target Date	Progress Update
			<p>With the assistance of gender equality consultants, a case study of AIC's gender equality mainstreaming to date was developed in the spring of 2010. The case study has been presented to various groups including a "brown bag" CIDA lunch attended by CIDA staff and representatives from other NGOs.</p>
<ul style="list-style-type: none"> <li>- Build costs for training/advisory services into budgets.</li> </ul>	<p>Following results of general discussions, advance project specific endeavours in conjunction with AIC overview functions.</p>	<p>By end of Year 1</p>	<p>In the 2007-08 Global Budget, funds were included to advance project specific gender equality training, workshops, etc. GE training was included as a specific area in the enhanced south-south exchange program component of 2007-08.</p>
<ul style="list-style-type: none"> <li>- Explore availability of funding in-country for gender-based analysis and training</li> </ul>	<p>As above.</p>		<p>At the 2009 IPM, project coordinators exchanged information on the status of gender-based analysis and training within their organizations and programming and on the availability of in-country funding.</p> <p>TSAEE participated in a gender audit (done by Oxfam UK) and also took part in a training workshop held in the fall of 2009 that focused on strengthening gender mainstreaming within structures and operations and has subsequently established a "Gender Desk" to support GE within the organization's endeavours.</p> <p>Although other partner organizations have advanced internal resources during this time, more work can still be done in encouraging in-country networks and accessing local resources.</p>
<p><b>6. Offer more opportunities for South-South professional exchanges and knowledge sharing</b></p>			
<ul style="list-style-type: none"> <li>- Encourage closer links and knowledge sharing between GSAP and GhIH</li> </ul>	<p>Shared in-field training for GhIH &amp; GSAP – RBM, Organizational assessment, gender.</p> <p>Develop criteria for S-S exchange</p> <p>Build S-S exchange budget in Y2</p> <p>Assess and determine capacity for future exchange.</p>	<p>Ongoing</p>	<p>Ghana projects held their first collaborative planning meeting in August/06 with a resulting agreement to work together in several key areas, including both capacity development at the organizational level, and community outreach programming. In January/07, CIDA approved additional funding to support enhanced south-south connections within the ITPP. In April 2007, three representatives from GSAP (2M, 1F), three from GhIH (2M, 1F), and a representative from CSHS (F) spent seven days with their TSAEE colleagues in Tanzania. In June, three delegates from TSAEE (2M, 1F) and two representatives (F) from the TPCCC traveled to Ghana.</p> <p>In addition to the exchanges between the Africa projects, the</p>

Recommendation	Plan of Action	Target Date	Progress Update
			<p>enhanced south-south endeavour supported increased collaboration between the two Ghana projects.</p> <p>The collaboration between the two Ghana projects has resulted in considerable inter-support between the partner organizations' two areas of specialization (horticulture and animal science) for the benefit of the project villages. It has also served to strengthen partners' confidence in further expanding south-south connections (e.g. GSAP with Animal Science Association Nigeria), and with other in-country institutions towards establishing an Agricultural Institute of Ghana.</p> <p>This inter-project collaboration proved highly successful and is evidenced in an increased sharing of methodologies and indicators between the participating projects in their planning, and in a decision to dedicate resources towards furthering inter-project collaboration. At the community level, this collaboration has widened the range of beneficiaries for both organizations and benefited communities and households by expanding their livelihood options.</p> <p>Together, GhIH and GSAP have spearheaded the creation of a Ghana Institute of Agriculture that brings together stakeholders representing nine agricultural bodies in Ghana and the Executive Secretary of the Millennium Development Authority.</p> <p>The products of the Ghanaian south-south cooperation have interested other projects in advancing collaborative efforts. In early 2008, an exchange was undertaken between the ITPP projects with soils management interests (SRICANSOL and CLMPAV, with ETCANSOL as observer) with representatives participating in a successful exchange to Vietnam. While the two projects have different objectives, they are tied together by the common agreement that land (soil and water) is the foundation of life. They have similar soil, landscapes, climate, and major crops with common issues of crop nutrients imbalance, erosion, salinization, iron toxicities, water logging and lack of adequate drainage in paddy lands. Not surprisingly, many of the same Beneficial Management Practices (BMPs) can be applied in both projects. Contacts and exchange of ideas continued between these two projects with an expanded delegation from Vietnam attending the IPM in Sri Lanka and staying on for an extended time at SRICANSOL sites. The newest land management project, ETCANSOL, has benefited through exposure to the experiences of the more mature soils projects in Sri Lanka and Vietnam, and in April 2010 two</p>

Recommendation	Plan of Action	Target Date	Progress Update
			representatives from ESSS participated in an exchange hosted by VIETCANSOL.
<ul style="list-style-type: none"> <li>- Hold IPMs in the South as possible</li> </ul>	Year 2 (Canada) Year 4 (South)	2007-08 2009-10	<p>The 2007 ITPP International Partners' Meeting (IPM) took place in Edmonton, Alberta from November 1st to 6th, just prior to the AIC Annual Conference. It was attended by both Canadian and International representatives from each of the ITPP projects and provided many opportunities for inter-project liaisons, sharing and learning.</p> <p>A very successfully 2009 IPM hosted by the SSSSL and SRICANSOL II project was held in Sri Lanka in late July/early August. Thirty delegates, representing the six projects (with extra delegates attending from CLMPAV and SRICANSOL II) and project management staff, participated in five very productive days of sharing, exchanging and learning.</p> <p>IPMs, and particularly those held in a project locale, have strongly encouraged a program concept amongst all partners.</p>
<ul style="list-style-type: none"> <li>- Share materials produced by partners amongst all.</li> </ul>	Foster at Y2/Y4 IPMs	ongoing	<p>The 2007 and 2009 IPMs were designed to, and resulted in excellent opportunities for inter-project sharing on a range of programming and organizational strengthening areas. On most topics, selected delegates presented, led and facilitated the sessions. Each project partner presented on successes to date following a standardized template. Project partners presented materials developed through member society collaborations in each country.</p> <p>Projects also are actively engaged in sharing information and literature on gender equality and climate change issues.</p> <p>As program staff reviews reports from projects, they share best practices broadly.</p>
<b>7. Strengthen Organization Sustainability</b>			
<ul style="list-style-type: none"> <li>- Devise clear exit strategies</li> </ul>	Communiqué to Costa Rica	2006-07 Ongoing Done	<p>End of project report from Costa Rica touched on this topic. Follow-up with Canadian Coordinator to advance. Done but unfortunately little feedback. Will continue to pursue with CR, and present topic to longer-term partners for input.</p> <p>As projects begin to prepare for the future, all have been asked to</p>

Recommendation	Plan of Action	Target Date	Progress Update
			<p>consider sustainability and exit strategies in their discussions.</p> <p>ITPP guidelines for semi and annual reports now include a section addressing sustainability of results at organizational level, as well as within the project communities.</p> <p>Partner organizations incorporate discussions on sustainability and exit strategies with community groups. An example of sustainability at the community level is evident in the TSAEE project where representatives from 18 “graduated” women’s groups have collectively come together to form a Women’s Network Association. As a result of their experience and increased skills and abilities gained by working cooperatively, these women have identified that creating their own independent organization allows greater networking opportunities and increased credibility as a formalized body.</p>
<ul style="list-style-type: none"> <li>- Develop overseas’ partners capacity in mobilization/diversification of resources with the support of Canadian partner to ensure long-term financial sustainability.</li> </ul>	<p>Include sustainability in organizational assessments</p>	<p>2006-07 ongoing</p>	<p>Topic included in initial survey with partners, and in OA materials provided to partner organizations.</p> <p>Sustainability is an area that is included and assessed in all reports.</p> <p>The update session on OAs at the 2009 IPM had an emphasis on succession planning and organizational sustainability. Many partner organizations, both Southern and Canadian, are looking to bring in new members to project committees with an emphasis on engaging women and younger members.</p> <p>Partner organizations now consider financial sustainability through membership fees, publications, training materials, and services to other organizations and agencies.</p>



## Section H - Goods Purchased by AIC International Twinning Partnership Project 2006-2011

Project	Description of Item Purchased	Date of Purchase	Current Location	Condition	Still in Use/Functioning		Plans for Ownership or Disbursement
					Yes	No	
ETCANSOL	Digital Camera	2008	Ethiopia Society of Soil Science (ESSS)	Good	X		Remain with ESSS
	Laptop Computer	2008	ESSS	Good	X		Remain with ESSS
	Desktop Computer	2008	ESSS	Good	X		Remain with ESSS
	Printer	2008	ESSS	Good	X		Remain with ESSS
	External hard drive, western digital, ITB	2008	ESSS	Good	X		Remain with ESSS
	Desktop Computer for website management	2011	ESSS	Good	X		Remain with ESSS
GhIH	Laptop computer	2006	Ghana Institute of Horticulturists (GhIH) UDS, Tamale	Good	X		Remain at GhIH office
	Bookshelf, office desk, chairs	2009	GhIH UDS, Tamale	Good	X		Remain at GhIH office
	Fixed telephone line	2009	GhIH UDS, Tamale	Good	X		Remain at GhIH office
	Digital Camera	2006	GhIH UDS, Tamale	Poor	X		Remain at GhIH office
	Flip chart stand	2006	GhIH UDS, Tamale	Good	X		Remain at GhIH office
	2 Desktop computers	2008	GhIH KNUST	Good	X		Remain at GhIH office
	LCD projector	2008	GhIH KNUST	Very good	X		Remain at GhIH office
	2 Printers	2008	GhIH KNUST	Good	X		Remain at GhIH office
	Bookshelf, office desk, chairs	2006	GhIH KNUST	Good	X		Remain at GhIH office
	Camcorder	2007	GhIH KNUST	Good	X		Remain at GhIH office
	Telephone landline	2006	GhIH KNUST	Good	X		Remain at GhIH office
	Mobile telephone	2007	GhIH KNUST	Good	X		Remain at GhIH office
	Digital Camera	2007	GhIH KNUST	Good	X		Remain at GhIH office
	Flip chart stand	2009	GhIH KNUST	Good	X		Remain at GhIH office
	Fax machine	2007	GhIH KNUST	Very good	X		Remain at GhIH office
	Photocopier	2010	GhIH KNUST	Very good	X		Remain at GhIH office
	Laminator	2010	GhIH KNUST	Good	X		Remain at GhIH office
	Book binder	2010	GhIH KNUST	Good	X		Remain at GhIH office
	Office cabinet	2010	GhIH KNUST	Good	X		Remain at GhIH office
	Paper cutter	2010	GhIH KNUST	Good	X		Remain at GhIH office

Project	Description of Item Purchased	Date of Purchase	Current Location	Condition	Still in Use/Functioning		Plans for Ownership or Disbursement
					Yes	No	
<b>GSAP</b>	Desktop Computer	2006	GSAP Office at Ag Research Instit, Frarfaha (ARI)	Obsolete		X	E-waste
	Photocopier	2006	ARI	Very good	X		Remain at GSAP office
	Digital camera	2006	Field Implementation office, Tamale (FIT)	Good	x		Remain at FIT office
	LCD Projector	2006	ARI	Very good	X		Remain at office
	Projector Screen	2006	ARI	Very good	X		Remain at office
	Scanner	2006	ARI	Very good	X		Remain at office
	Mini-photocopier with fax	2006	ARI	Not working		X	E-waste
	UPS	2006	ARI	Obsolete		X	E-waste
	Desktop computer	2007	ARI	Very good	X		Remain at office
	Mini-printers (2)	2007	ARI	Not working		X	E-waste
	Printer	2009	FIT	Very good	X		Remain at office
	Shea nut processing equipment (4)	2006	Women's groups in: Mandarin, Soma, Kunwoub and Sentu	Good (2) Need repair (2)	x	X	Remain with women's groups
	Two sets of donkeys and carts	2006	Mandarin women's group	One cart needs repair, one donkey lost	X		Remain with Mandarin women's group
	One set of donkey and cart	2009	Duu women's group	Good	X		Remain with Duu women's group
	Smoke free shea nut oil extractor	2008	Jaksally/Mandarin women's group partnership	Good	X		Remain with Jaksally Mandarin women's group partnership
<b>TSAEE</b>	Motorcycles (2)	2007	TSAEE Magu and Ukerewe	Good	X		Remain with TSAEE Magu and Ukerewe
	Desktop computer	2008	TSAEE Ukiriguru	Good	X		Remain with TSAEE Ukiriguru
	Printer	2008	TSAEE Ukiriguru	Poor	X		Remain with TSAEE Ukiriguru
	Zoomer (Power point)	2009	TSAEE Ukiriguru	Very good	X		Remain with TSAEE Ukiriguru
	Laptop computer	2009	TSAEE Ukiriguru	Good	X		Remain with TSAEE Ukiriguru
<b>SRICANSOL</b>	CDMA phone	2006	RRDI, Batalagoda	Good	X		Remain with SSSSL
	Laptop computer	2006	NRMC, Peradeniya	Not working		X	Remain with SSSSL
	Laptop computer	2010	NRMC, Peradeniya	Good	X		Remain with SSSSL
	Laptop computer	2008	NRMC, Peradeniya	Good	X		Remain with SSSSL

Project	Description of Item Purchased	Date of Purchase	Current Location	Condition	Still in Use/Functioning		Plans for Ownership or Disbursement
					Yes	No	
	Desktop computer	2008	LRC, NRMC, Peradeniya	Poor	X		Remain with SSSSL
	HP scanner	2006	NRMC, Peradeniya	Good	X		Remain with SSSSL
	HP printer	2006	NRMC, Peradeniya	Not working		X	Remain with SSSSL
	HL laser printer	2010	NRMC, Peradeniya	Good	X		Remain with SSSSL
	Cannon plotter	2008	NRMC, Peradeniya	Good	X		Remain with SSSSL
	Photocopier	2008	SRICANSOL Centre	Good	X		Remain with SSSSL
	Multimedia projector	2007	NRMC, Peradeniya	Good	X		Remain with SSSSL
	Magalen, eXplorist 400	2006	RRDI, Batalagoda	Good	X		Remain with SSSSL
	Magalen, eXplorist 400	2006	RARDC, Aralaganvila	Good	X		Remain with SSSSL
	Filing Cabinet	2006	NRMC, Peradeniya	Good	X		Remain with SSSSL
<b>VIETCANSOL</b>	Amplifier, microphone & speaking trumpet	2006	Con village	Not working		X	E-waste
	Amplifier, microphone & speaking trumpet	2006	Trung village	Poor	X		Remain at Trung village
	Amplifier, microphone & speaking trumpet	2006	Phuc Thuong village	Poor	X		Remain at Phuc Thuong village
	Digital camera	2007	Extension staff of Thu Cuc, Tan Thinh and Binh Cang communes	Good	X		Remain at VIETCANSOL office in NISF.
	Laptop computer	2007	VIETCANSOL office in NISF branch of VSSS	Poor		X	E-waste
	Bookcase and 160 agricultural technology books	2008	Con village	Good	X		Remain at Trung and Con village library
	Bookcase and 180 agricultural technology books	2008	Phuc Thuong village	Good	X		Remain at Phuc Thuong village library
	Bookcase and 180 agricultural technology books	2008	Ag Extension office of Tan Son district	Good	X		Remain at Agriculture extension office
	5 external hard disks	2008	VIETCANSOL office	Good	X		Remain at VIETCANSOL office
	Laptop computer	2009	VIETCANSOL office	Good	X		Remain at VIETCANSOL office
<b>SADP-Nepal</b>	Photocopier	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Office bookcase, tables and chairs	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Printers (2)	2010	Office at Tanahun	Good	X		Remain at Tanahun office

Project	Description of Item Purchased	Date of Purchase	Current Location	Condition	Still in Use/Functioning		Plans for Ownership or Disbursement
					Yes	No	
	Desktop computer	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Stapler Machine	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Knife, sickle, sprayer, axe, spade	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Whiteboard with stand	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	4GB Pendrive	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Laptop computer	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Digital camera	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Notice board	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Printer	2010	Office at Kathmandu	Good	X		Remain at Kathmandu contact office
	Water supply feeting for irrigation	2010	Office at Tanahun	Good	X		Office at Tanahun
	Laptop adaptor	2010	Office at Tanahun	Good	X		Remain at Tanahun office
	Projector	2011	Office at Tanahun	Good	X		Remain at Tanahun office
	Hill take Drums	2011	Darai, Kumal communities	Good	X		Remain in communities
	Pumping motor	2011	Darai, Kumal communities	Good	X		Remain in communities



Canadian International  
Development Agency

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développement international

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### TOTAL FUNDING DECLARATION

The Organization declares and guarantees that all sources of proposed funding for the Project with their corresponding amounts are accurately presented below. The Organization hereby further confirms that it shall also update this declaration in its final financial report.

#### Description of All Sources of Funding for the Project

Name of Funding Source	Amount
Canadian International Development Agency, Voluntary Sector Programs	\$2,503,500.00
Total	\$2,503,500.00

Name of Organization Agricultural Institute of Canada		Title of representative Acting Executive Director	
Name of representative Frances Rodenburg	Signature 	Date (YYYY-MM-DD): 2011-07-29	



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## DECLARATION REGARDING OUTSTANDING DEBTS DUE TO HER MAJESTY

Project No O1001610-S63550
Purchase Order No

I hereby declare that this Organization has no outstanding debts due to Her Majesty.

Name of Organization Agricultural Institute of Canada	Title of representative Acting Executive Director	
Name of representative Frances Rodenburg	Signature <i>Frances Rodenburg</i>	Date (YYYY-MM-DD): 2011-07-20

**OR**

I hereby declare that the sums identified below are outstanding debts due to Her Majesty.  
I recognize that the sums which are due to me by the Government of Canada can be used to set off against any amount payable to Her Majesty.

Department or Agency	Amount
Total	

Name of Organization	Title of representative	
Name of representative	Signature	Date (YYYY-MM-DD):