



Internal use
517832

Application for a Grant

Identification					
This page will be made available to selection committee members and external assessors.					
Funding opportunity Partnership Development Grants					
Program name 1 - Insight 2 - Connection		Type of partnership New			
Grant type Individual					
Application title Partnership development to explore innovative uses of low cost communication technology for knowledge mobilization in agricultural communities of practice					
Applicant family name Gow		Applicant given name Gordon		Initials A	
Org. code 1480111	Full name of applicant's organization and department University of Alberta Communications and Technology Graduate Program				
Org. code 1480111	Full name of administrative organization and department University of Alberta Communications and Technology Graduate Program				
Scholar type Regular <input checked="" type="radio"/> New <input type="radio"/>					
If New, specify category 1 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>					
Does your proposal involve human beings as research subjects? If "Yes", consult the <i>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans</i> and submit your proposal to your organization's Research Ethics Board. Yes <input checked="" type="radio"/> No <input type="radio"/>					
Does your proposal involve activity that requires a permit, licence, or approval under any federal statute; or physical interaction with the environment? If 'Yes', complete Appendices A and B. Yes <input type="radio"/> No <input checked="" type="radio"/>					
Year 1 Year 2 Year 3 Total					
Total funds requested from SSHRC		<u>47,750</u>	<u>79,925</u>	<u>62,900</u>	<u>190,575</u>

Organization Information [not applicable]

The University of Alberta is designated as the administering organization.

Organization Information (If Applicable)—maximum two pages

When a non-academic organization is the administering organization and proposes to manage the funds, you must include the following information in an electronic document:

- the mandate of the organization;
- descriptions of the staff position(s) assigned to the proposed project and the qualifications of individuals in these positions;
- an overview of the organization's outcomes and, if applicable, specific outcomes related to research;
- discussion of research protocols, including the freedom to conduct research and publish findings;
- proof of incorporation; and
- the organization's website address.



Activity Details			
The information provided in this section refers to your research proposal.			
Keywords			
List keywords that best describe your proposed research or research activity. Separate keywords with a semicolon.			
knowledge mobilization; communication and technology; agriculture; innovation; Sri Lanka; community engagement			
Priority Areas - Priority area(s) most relevant to your proposal.			
1. Digital Economy			
Partnership Approaches			
One or more possible formal partnership approaches.			
Cross-sector co-creation of knowledge & understanding; Disciplinary and interdisciplinary research partnerships; Partnered knowledge mobilization			
If "Other", specify			
Disciplines - Indicate and rank up to 5 disciplines that best correspond to your proposal.			
Rank	Code	Discipline	If "Other", specify
1	50624	Communication Development	
2	50606	Communication Technology, Informatics	
3	63406	Social Processes	
4	63499	Other Sociology	Environmental Sociology
5			
Areas of Research			
Indicate and rank up to 3 areas of research related to your proposal.			
Rank	Code	Area	
1	120	Communication	
2	242	Information Technologies	
3	102	Agriculture	
Temporal Periods			
If applicable, indicate up to 2 historical periods covered by your proposal.			
From		To	
Year	BC	AD	Year
_____	<input type="radio"/>	<input type="radio"/>	_____
_____	<input type="radio"/>	<input type="radio"/>	_____
_____	<input type="radio"/>	<input type="radio"/>	_____

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB



Family name, Given name
Gow, Gordon

Activity Details (cont'd)

Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Region
1	6400	South Asia
2		
3		

Countries

If applicable, indicate and rank up to 5 countries covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Country	Prov./ State
1	6408	SRI LANKA	
2			
3			
4			
5			



Family name, Given name

Gow, Gordon

Summary of Proposed Partnership and Activity

The summary of your proposal should indicate the challenges or issues to be addressed; the overall goal and objectives of the proposed partnership; and the breadth of the partnership, and the meaningful engagement of the partners involved.

The purpose of the proposal is to establish and support the activities of an emerging international and multi-organizational partnership among the University of Alberta, LIRNEasia (Sri Lanka), the University of Guelph, the University of Peradeniya (Sri Lanka), and the Sri Lanka Department of Agriculture. The partnership will use a Sri Lankan case study to examine how academic institutions, government agencies and international organizations can work with local communities to enhance knowledge mobilization for sustainable farming practices using low cost, widely accessible information and communication technologies (ICTs). The emerging partnership represents an interdisciplinary and cross-sectoral research initiative with the broad goal of enhancing capacity for local innovation in the digital economy.

The aim of the emerging partnership proposed herein is to develop a collaborative capacity to conduct in-depth social science research that considers all segments of the agricultural value chain. The partnership seeks to engage agricultural communities of practice in social practices related to knowledge mobilization that might be enhanced through innovative use of low cost, widely accessible ICTs such as mobile phones and community radio broadcasting. A principal focus for the partnership will be the enhancement of knowledge mobilization between agricultural extension services and communities of practice organized around sustainable farming. In particular, we are interested in how to link traditional agricultural extension services with those communities of practice that are taking innovative approaches to sustainable farming. We are also interested in those communities of practice that involve farm women and young farmers, with evidence suggesting that these groups may be influential adopters of new ICTs.

The emerging partnership between the Sri Lankan organizations and the University of Alberta and University of Guelph will also contribute to the scholarship of community-university engagement that examines the processes and structures of knowledge mobilization activities with respect to international cross-sector and inter-disciplinary projects involving Canadian universities. Given that the Universities of Alberta and Guelph, for example, have two of the strongest Agricultural faculties in Canada, this is a rich opportunity to build fruitful partnerships with the oldest and most influential agricultural university in Sri Lanka. The project is also important because it will contribute to both the theory and practice within the field of ICT for Development (ICT4D) that has called for better understandings of collaborative processes for knowledge mobilization when addressing complex social and environmental issues in developing countries.



Family name, Given name

Gow, Gordon

Participants

List names of your team members (co-applicants and collaborators) who will take part in the intellectual direction of the research. Do not include assistants, students or consultants.

Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input type="radio"/> Non-academic <input checked="" type="radio"/>	
Family name Waidyanatha		Given name Nuwan	Initials T
Org. code 1	Full organization name LIRNEasia		
Department/Division name N/A			
Role Co-applicant <input checked="" type="radio"/> Collaborator <input type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Beckie		Given name Mary	Initials A.
Org. code 1480111	Full organization name University of Alberta		
Department/Division name Faculty of Extension			
Role Co-applicant <input checked="" type="radio"/> Collaborator <input type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Krogman		Given name Naomi	Initials T.
Org. code 1480111	Full organization name University of Alberta		
Department/Division name Rural Economy			
Role Co-applicant <input checked="" type="radio"/> Collaborator <input type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Hambly		Given name Helen	Initials V
Org. code 1350311	Full organization name University of Guelph		
Department/Division name School of Environmental Design & Rural Development			
Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Mendis		Given name Eresha	Initials
Org. code 9554102	Full organization name University of Peradeniya		
Department/Division name Department of Food Science and Technology, Faculty of Agriculture			

List of Partners and Other Contributors

Invited Partners Confirmed

- University of Alberta, Canada
 - Katy Campbell, Dean, Faculty of Extension
 - website: <http://www.ualberta.ca>
- University of Guelph, Canada
 - Rob Gordon, Dean, Ontario Agricultural College
 - website: <http://uoguelph.ca>
- LIRNEasia, Sri Lanka
 - Dr. Rohan Samarajiva
 - website: <http://www.lirneasia.net/>
- Sri Lanka Department of Agriculture, Sri Lanka
 - Dr. Rohan Wijekoon, Deputy Director Communication, Extension and Training Division
 - website: <http://www.agridept.gov.lk/>
- University of Peradeniya, Sri Lanka
 - Prof. K. Samarasinghe, Dean, Faculty of Agriculture
 - website: <http://www.pdn.ac.lk/agri/>

Other contributors confirmed

- Agricultural Service Centre, Dambulla District, Sri Lanka
- Agricultural Service Centre, Matale District, Sri Lanka
- Audio Visual Centre, Department of Agriculture, Sri Lanka
- Kule Institute for Advanced Studies, University of Alberta

Other contributors not yet confirmed

- Asia-Pacific Association of Agricultural Research Institutes (APAARI) - <http://www.apaari.org>
- Farm Radio International - <http://www.farmradio.org/>
- FreedomFone - <http://www.freedomfone.org/forum>
- FrontlineSMS - <http://frontlinesms.ning.com/>
- Horticulture Research and Development Institute (HORDI) - <http://www.agridept.gov.lk/index.php/en/institutes/131>
- Lanka Organic Agriculture Movement (LOAM) - <http://loamsrilanka.org/>
- Movement for National Land and Agricultural Reform (MONLAR) (no website)
- Promoting Local Innovation (Prolinnova) - www.prolinnova.net
- Rangiri Sri Lanka FM, Dambulla (radio broadcaster)
- Small Organic Farmers Association (SOFA) - <http://www.biofoodslk.com/>

- Ushahidi <http://www.usahidi.com/about-us>
- Women's Agricultural Extension Programme, Sri Lanka (no website)
- Youth Farmers Club, Sri Lanka (no website)



Family name, Given name

Gow, Gordon

Partners - A partner organization may be, for example, a Canadian or foreign: postsecondary institution, government department (federal, provincial, territorial, municipal), for-profit or not-for-profit organization, or foundation.

Org. code	Full organization name Department of Resource Economics and Environmental Sociology, University of Alberta			Organization type University		
Address 515A General Services Building University of Alberta			Contact family name Swallow			
			Given name Brent		Initials	
City/Municipality Edmonton	Prov./State AB	Postal/Zip code T6G2H1	Country code	Area code	Number	Extension
Country CANADA			Telephone number	780	492-6656	
			Secondary number			
			Fax number	780	491-0268	

E-mail sshrc.ales@gmail.com

Web address <http://www.rees.ualberta.ca/StaffProfiles/Academics/Swallow.aspx>

Org. code	Full organization name Extension Faculty, University of Alberta			Organization type University		
Address 2-246 Enterprise Square			Contact family name Campbell			
			Given name Katy		Initials	
City/Municipality	Prov./State	Postal/Zip code	Country code	Area code	Number	Extension
Country CANADA			Telephone number	780	492-2681	
			Secondary number			
			Fax number			

E-mail sshrc.extension@gmail.com

Web address

Org. code	Full organization name LIRNEasia			Organization type Research organization		
Address 12 Balcombe Place Colombo 0080			Contact family name Samarajiva			
			Given name Rohan		Initials	
City/Municipality	Prov./State	Postal/Zip code	Country code	Area code	Number	Extension
Country SRI LANKA			Telephone number	94	77	7352361
			Secondary number			
			Fax number			

E-mail sshrc.lirneasia@gmail.com

Web address



Family name, Given name

Gow, Gordon

Partners (cont'd)

Org. code	Full organization name Ontario Agricultural College, University of Guelph	Organization type University
Address Ontario Agricultural College University of Guelph		Contact family name Gordon
		Given name Robert
		Initials
City/Municipality Guelph	Prov./State ON	Postal/Zip code N1G2W1
Country CANADA	Country code Telephone number	Area code 519
	Number 824-4120	Extension 52285
E-mail sshrc.guelph@gmail.com		
Web address		
Org. code	Full organization name Sri Lanka Department of Agriculture	Organization type Federal government
Address P.O. Box 01 Peradeniya		Contact family name Wijekoon
		Given name Rohan
		Initials
Country SRI LANKA	Country code Telephone number	Area code 81
	Number 2388618	Extension
E-mail sshrc.doa@gmail.com		
Web address		
Org. code	Full organization name University of Peradeniya	Organization type University
Address Faculty of Agriculture University of Peradeniya Peradeniya		Contact family name Samarasinghe
		Given name K
		Initials
Country SRI LANKA	Country code Telephone number	Area code 81
	Number 2395010	Extension
E-mail sshrc.peradeniya@gmail.com		
Web address		



Family name, Given name
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Partner's Contributions

A partner is an organization that participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.

	Cash	In-kind
	Amount	Amount
Personnel costs		
Student salaries and benefits/Stipends		
Undergraduate	0	0
Masters	17,700	0
Doctorate	0	0
Non-student salaries and benefits/Stipends		
Postdoctoral	0	0
Other	0	80,870
Travel and subsistence costs		
Applicant/Team member(s)		
Canadian travel	1,500	0
Foreign travel	0	0
Students		
Canadian travel	0	0
Foreign travel	0	0
Other expenses		
Professional/Technical services	0	0
Supplies	0	0
Non-disposable equipment		
Computer hardware	0	4,000
Other	0	0
Other expenses (specify)		
	10,000	20,600
Total of all partners' contributions	29,200	105,470
A. Total of all partners' contributions (cash + in-kind)		134,670
B. Total funds from other sources		16,000
C. Total funds requested from SSHRC		190,575
Total cost of project (A + B + C)		341,245



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Funds Requested from SSHRC

For each budget year, estimate as accurately as possible the research costs that you are asking SSHRC to fund through a grant. For each Personnel costs category, enter the number of individuals to be hired and specify the total amount required. For each of the other categories, enter the total amount required.

	Year 1		Year 2		Year 3	
Personnel costs	No.	Amount	No.	Amount	No.	Amount
Student salaries and benefits/Stipends						
Undergraduate	3	3,500	3	3,500	3	3,500
Masters	1	3,500	3	21,000	1	7,000
Doctorate	1	3,500	1	3,500	1	3,500
Non-student salaries and benefits/Stipends						
Postdoctoral						
Other	1	13,000	1	13,000	1	13,000
Travel and subsistence costs						
		Year 1		Year 2		Year 3
Applicant/Team member(s)						
Canadian travel						
Foreign travel		15,300		28,000		21,500
Students						
Canadian travel						
Foreign travel		3,700		5,675		6,900
Other expenses						
Professional/Technical services		1,750		1,750		4,000
Supplies		500		500		500
Non-disposable equipment						
Computer hardware						
Other						
Other expenses (specify)						
Workshop fees		2,000		2,000		2,000
Communication (data) services		1,000		1,000		1,000
Total		47,750		79,925		62,900



Funds from Other Sources

List all contributors (e.g., individuals, not-for-profit, philanthropic foundations, private sector organizations) that are providing cash and/or in-kind contributions for the proposal.

Full organization name Contribution type	Confirmed	Year 1	Year 2	Year 3	
University of Alberta Conference Grant Cash	<input type="checkbox"/>	0	0	10,000	
University of Alberta International (Group Education Abroad Award) Cash	<input type="checkbox"/>	0	6,000	0	
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
Total funds from other sources		0	6,000	10,000	

Budget Justification

Personnel costs / Student salaries and benefits / Undergraduate

The University of Alberta will hire an undergraduate student for each year of the project to manage its website and online knowledge mobilization activities (\$1500/yr x 3yrs = **\$4500**)

The University of Peradeniya will hire two research assistants from its undergraduate program for each year of the project (\$2000/yr x 3 yrs = **\$6000**)

Personnel costs / Student salaries and benefits / Masters

The University of Alberta and University of Guelph will each hire a Masters student in each year of the project as a part-time research assistant in accordance with institutional agreements (in year 1, the Masters student from UA will be funded through cash contribution from Dept. of Resource Economics). Years 1 and 3 amounts are 140hrs x \$25/hr = **\$3500** per student. Year 2 (field work) amount 420hrs x \$25/hr = \$10,500 per student @ 2 students = **\$21,000**)

Personnel costs / Student salaries and benefits / Doctorate

The Sri Lanka partners will hire a Doctoral student as a research assistant in Sri Lanka for the project in years 1-3. (\$100/day x 35 days/yr = **\$3500/yr**)

Personnel costs/Non-student salaries and benefits/Other

LIRNEasia will employ a Senior Research Manager in Sri Lanka to oversee the project in years 1-3. Salary includes LIRNEasia overhead costs. (\$325/day x 40 days/yr. = **\$13,000/yr**)

Travel and subsistence costs / Applicant/Team members / Foreign travel

The project requires that the four (4) Canadian team members travel to Sri Lanka for partnership meetings in years 1-3. Duration for each meeting is 6 days. Per person: airfare (\$2000); hotel (\$600); per diem (\$500); ground (\$100); total per person/per trip = \$3200 @ 4 persons = **\$12,800/yr**

We are also requesting funds to cover partial travel costs for two (2) Sri Lankan partners to attend partnership meetings in years 1-3. Per person: ground (\$150); hotel (\$600); per diem (\$500); total per person/per trip = \$1250 @ 2 persons = **\$2500/yr**

We are requesting travel funds for two (2) Canadian team members to travel to Sri Lanka to participate in field research during year two of the project (15 days duration). Per person: airfare (\$2000); hotel (\$1125); per diem (\$750); ground (\$300); total per person = \$4175 @ 2 = **\$8350**.

We are also requesting funds to cover partial travel costs for two (2) Sri Lankan partners to participate in field research during year two of the project (15 days duration). Per person: ground (\$300); per diem (\$750); hotel (\$1125); total per person = \$2175 @ 2 = **\$4350**.

We are requesting funds to cover travel costs for two (2) Sri Lankan team members to travel to Canada for the knowledge mobilization symposium in year three of the project. Per person: airfare (\$2000); hotel (\$600); per diem @ 6 days (\$400); ground (\$100); total per person = \$3100 @ 2 = **\$6200**

Travel and subsistence costs / Students / Foreign travel

We are requesting funds to cover travel costs for one Canadian graduate student to travel to Sri Lanka to attend research meetings in years 1 and 3 of the project. Airfare (\$2000); hotel (\$600); per diem (\$500); ground (\$100); total = **\$3200 per trip**.

We are requesting funds to cover travel costs for one Canadian graduate student to travel to Sri Lanka to participate in field research in year 2 of the project (15 days duration). Airfare (\$2000); hotel (\$1125); per diem (\$750); ground (\$300); total = **\$4175**.

We are requesting funds to cover partial travel costs for Sri Lanka Doctorate student to travel within Sri Lanka to participate in partnership meetings in years 1-3: ground (\$100); accom. & per diem (\$400) = **\$500/yr**; and to cover partial travel costs for this student to participate in field research in year 2 of the project: ground (\$200); accom. & per diem \$800 = **\$1000**.

We are also requesting funds to cover travel costs for the Sri Lanka Doctorate student to travel to Canada in year three to participate in the knowledge mobilization symposium. Airfare (\$2000); hotel (\$600); per diem @ 6 days (\$400); ground (\$100); total = **\$3200**.

Other expenses / Professional/technical services

We are requesting funds to cover costs of producing reports, training materials, and other knowledge mobilization resources in each year of the project. LIRNEasia will provide professional services in support of this activity. In line with the project plan, year three will require significant development of KM materials. Year 1 (**\$1750**); Year 2 (**\$1750**); Year 3 (**\$4000**).

Other expenses / Supplies

The partnership will require a small amount each year to cover costs associated with office supplies and presentation materials (**\$500/yr**).

Other expenses / Other expenses (specify)

LIRNEasia is a cost recovery based organization and has provided us with a quote for costs to assist in organizing and publicizing workshops with community participants as part of the annual research meetings in years 1-3. (\$2000/yr @ 3 years = **\$6000**).

We are requesting funds to cover costs of communication services in Sri Lanka (activation of 6 mobile phone modems, voice/text services for prototyping \$1000/yr @ 3 years = **\$3000**).

Previous SSHRC Funding [not applicable]

The proposed partnership activities are not the result of previous SSHRC-funded activities.

If the proposed partnership activities are the result of previous SSHRC-funded activities, please explain how they differ from those previously financed through SSHRC grants. Describe the results and impacts of past SSHRC-funded activities, and explain how these could influence the new activities offered in your proposal. Describe any potential or perceived overlaps with, as well as value added for, other continued SSHRC funding. Also describe any links developed with the partners as part of previous SSHRC-funded activities.



Family name, Given name

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Statement of Alignment

The proposal has been identified as being relevant to one of SSHRC's priority areas. The statement addresses how the proposal meets the expected outcomes of the priority area.

Digital economy

The partnership and activities proposed in this application align with the Digital Economy priority area, which encourages the critical exploration of how individually and collectively we adapt to, and take advantage of, widespread connectivity and digital media. In this case we are principally focussed on the adoption and use of low cost, widely accessible media such as mobile communications devices and radio broadcasting.

Within the Digital Economy priority, the partnership has a special interest focus on the topic area defined by SSHRC as "the capacity to innovate using digital technologies" insofar as we are exploring the relationship between access and use of ICTs and the creation of innovative knowledge mobilization strategies among local communities of practice. Of special note is that the partnership focuses specifically on low cost, open source software platforms that can expand access to digital technology to resource-constrained communities and yet enable capacity building at the local level.

The partnership aligns with two specific lines of inquiry in this regard:

The training/technology interplay: What is the impact of low cost, widely accessible ICTs---both technology and digital skills---on knowledge mobilization? What types of investment do we need to improve knowledge mobilization processes? What are the social and technical investments needed to build capacity at the community level for sustained training/technology initiatives?

Societal implications: How can the design and use of new technologies affect an individual's life choices, change the way society interacts, and offer new modes of interaction for governments and citizens?

Expected outcomes

The partnership and its related research activities are expected to deepen our understanding of the opportunities and challenges for knowledge mobilization among communities of practice; further, it will explore through field research the changes in behaviour and ways of learning and working with community-based innovation that will benefit Canadian scholars and practitioners working on knowledge mobilization projects with community organizations in Canada and abroad. The partnership will promote engagement in research and sustained relationships with policy-makers, practitioners, professional associations, community organizations and end users of research in Canada and Sri Lanka and provide new research insights on the creation and use of low cost, innovative digital communication services as a means of capacity building in a collaborative research setting.

Goal and Project Description

The purpose of the proposal is to establish and support the activities of an emerging international and multi-organizational partnership among the University of Alberta, LIRNEasia (Sri Lanka), the University of Guelph, the University of Peradeniya (Sri Lanka), and the Sri Lanka Department of Agriculture. The partnership will use a Sri Lankan case study to examine how academic institutions, government agencies and international organizations can work with local communities to enhance knowledge mobilization for sustainable farming practices using low cost, widely accessible information and communication technologies (ICTs). The emerging partnership represents an interdisciplinary and cross-sectoral research initiative with the broad goal of enhancing capacity for local innovation in the digital economy.

Background

In September 2011 with funding from the Kule Institute for Advanced Studies, three Canadian researchers, (University of Alberta), a graduate student, members of research organization LIRNEasia, Dean and faculty members from the University of Peradeniya, and Senior staff from the Extension and Training Division of the Department of Agriculture met in Sri Lanka to discuss and investigate the possibilities of working together to explore the role of low cost, accessible ICTs in mobilizing knowledge for local agricultural communities of practice. The meetings were very successful in a number of ways. We were able to observe the rich social and institutional dynamics of local farming communities in Sri Lanka; we gained firsthand knowledge of the success stories and ongoing challenges for agricultural extension services with respect to the use of ICTs; and we initiated a number of important relationships for further development of partnerships with university faculty members, graduate students, government extension officers, and local farming communities.

The choice of Sri Lanka for this partnership is based on several considerations. The University of Alberta has worked with LIRNEasia on ICT research projects since 2006, establishing a solid foundation for this initiative. The University of Peradeniya has worked with the Dept. of Agriculture to study the impact of new ICTs in agricultural extension and LIRNEasia has conducted studies on the impact of mobile phones in agricultural value chains in Sri Lanka (Dissanayake, et al., 2009, 2010).

The Department of Agriculture's Extension and Training Division has a history of using information and communication technologies (ICTs) to mobilize knowledge for local agricultural communities in the country. In particular the Audio Visual Centre of the Dept of Agriculture has undertaken pioneering efforts in radio, television, and cyber-extension services over the past decade and was recently recognized through an eWorld Award for its adoption of Web 2.0 technologies to enhance agricultural extension services (Department of Agriculture, 2011). The AVC is now in the process of further advancing its work in this area service with a new initiative to create National Agricultural Information Centres across the country. The partnership brings together the AVC, along with the University of Peradeniya and LIRNEasia. Each of these organizations has an important role in studying the impact of ICT on Sri Lankan agriculture communities.

Research carried out so far in Sri Lanka and other developing countries has focused on an important but relatively narrow segment of the agricultural value chain, principally at the market stage, with an emphasis on socio-economic aspects related to transaction costs (Aker 2010; Donner, 2010; Islam, 2011; Jensen, 2007; Lokanathan, et al., 2011). The aim of the emerging partnership proposed herein is to develop a collaborative capacity to conduct in-depth social science research that considers all segments of the agricultural value chain (i.e., crop choice to market) and attempts to engage agricultural communities of practice how social practices related to knowledge mobilization might be enhanced through innovative use of low cost, widely accessible ICTs such as mobile phones and community radio broadcasting.

A principal focus for the partnership will be on how to enhance knowledge mobilization between agricultural extension services and communities of practice organized around sustainable farming, such as organic agriculture (Lanka Organic Agriculture Movement (LOAM); Small Organic Farmers SOFA; home gardens (Horticulture Research and Development Institute (HORDI; agroecology and the Via Campesino movement (Movement for National Land and Agriculture Reform (MONLAR)). In particular, we are interested in how to link traditional agricultural extension services with those communities of practice that are taking innovative approaches to sustainable farming (Hazlewood & Mock, 2010; Mudannayake, 2006). We are also particularly interested in those communities of practice that involve farm women and young farmers, with evidence suggesting that these groups may be influential in knowledge mobilization processes and activities (de Silva, H. and Ratnadiwakara, 2009; FAO, 2011; Mathur, 2011; Potnis, 2011; Prakash, 2003; Salegio, Krogman & Veeman, 2000).

The emerging partnership between the Sri Lankan organizations and the University of Alberta and University of Guelph will also contribute to the scholarship of community-university engagement that examines the processes and structures of knowledge mobilization activities with respect to international cross-sector and inter-disciplinary projects involving Canadian universities. Given the Universities of Alberta and Guelph, for example, have two of the strongest Agricultural faculties in Canada, this is a rich opportunity to build fruitful partnerships with the oldest and most influential agricultural university in Sri Lanka. The project is also important because it will contribute to both the theory and practice within the field of ICT for Development (ICT4D) that has called for better understanding of collaborative processes for knowledge mobilization when addressing complex social and environmental issues in developing countries (Avgerou, 2010; Heeks, 2010; Hussain and Tongia, 2010)

Objectives of the Partnership Development Project

Short range

- cultivate and strengthen relationships with existing partners; convert informal partnerships and partnership prospects into formal ones. Conduct preliminary activities to inform the selection of case studies, to develop capacity for rapid prototyping of technology-enhanced services, and to collaborate on an integrated action research strategy with input from all partners.

Mid range

- establish a cross-sector and inter-disciplinary partnership arrangement.
- carry out the action research strategy by working with the communities of practice to identify opportunities for ICT-enhanced knowledge mobilization and then conduct a series of small scale pilot studies in response.

Long range

- understand how cross-sector and inter-disciplinary partnerships can contribute to a technology-enhanced community of practice approach in the agricultural sector.
- propose a sustainable partnership model for innovation that supports collaboration between local communities, universities, government, and non-government partners.
- create opportunities for Canadian scholars and students to advance their experience and expertise in fostering international research and development partnerships.

Proposed approach

The proposed partnership is complex and involves a number of partners, co-applicants and collaborators representing a diversity of perspectives. This work is therefore interdisciplinary in scope and is informed by a number of different but overlapping theoretical frameworks that represent a rich blend of social perspectives on the use and adoption of ICTs. At its foundation, the emerging partnership is founded on a social constructivist approach that was successfully adopted for previous collaboration projects between University of Alberta and LIRNEasia (Gow & Waidyanatha, 2010, 2011). This project will continue to advance this approach by merging it with a communities of practice approach that recognizes and involves partners through a technology-stewardship model and collaborative governance structure that invites dialogue between ‘experts’ and ‘users’ (Wenger, et al. 2009). This approach, in turn, is enriched theoretically with ideas drawn from theories of social practices and knowledge mobilization grounded in an agricultural context (Beckie, 2000; Beckie and Bogdan, 2010; Krogman et al 2000; Rosset et al., 2011; Scoones and Thompson 2009; Chambers et al., 1989). Numerous scholars (Nelson et al 2005; Schroeder et al 2006) speak to the need to cultivate interdisciplinary expertise on sustainable agriculture and food systems, especially in terms of employing a social systems perspective (Roling and Wagemakers 2000). The social practices approach calls for qualitative research that examines daily interactions within several domains of living, such as places of work, the home, transportation, food procurement, preparation and storage, work and leisure, with particular sensitivity to how there may be contextual variation in these daily patterns (Spaargaren, 2011; Werner-Brand, 2010). By understanding how people within a community carry out their routine daily practices, we can better understand opportunities for knowledge mobilization and innovation using ICTs.

The ICT components for the partnership are based on free, open source software platforms that integrate mobile phones, radio broadcasting, and Web 2.0 services. These platforms include FrontlineSMS, FreedomFone, and Ushahidi which are being used around the world in both developing and developed countries and are well suited to rapid prototyping of a diverse range of communication services including those in the agricultural sector (e.g., Scialom, 2011). The partnership arrangement will

explore the best practices in enabling local communities to work with agricultural extension services to develop innovative knowledge mobilization techniques using these low cost platforms. Examples might include the provision of location-specific crop or weather information (FrontlineSMS/FreedomFone), mapping and visual analysis for pest management (Ushahidi), as well as services for organizing local meetings or managing a database of frequently asked questions (FrontlineSMS/FreedomFone).

We are proposing a phased project over three years to develop the partnership and achieve its range of objectives. The three year time span will provide necessary time needed to establish the partnership arrangement, undertake a collaborative research effort, and to carry out the knowledge mobilization plan.

The first year of the project will centre on a set of activities intended to refine our working relationship, to cultivate and solidify the partnership, and to establish a work plan for achieving the mid and long term objectives of the partnership. We will begin with week-long research meeting in the summer of 2012 where the partners will come together to begin work on a partnership model and an integrated action research strategy. The research strategy will draw on results of a small scale pilot study using



FrontlineSMS that will be launched in early 2012 as a research collaboration between the University of Alberta, Sri Lanka Department of Agriculture and LIRNEasia.

During the second year of the partnership, in-depth qualitative studies will be carried out with a set of communities of practice identified as part of year one activities. The

field work will be conducted over a three week period using involving focus groups and workshops. The field study will be integrated with a study abroad program that will allow a group of graduate students from Canada to travel to Sri Lanka to gain hands-on experience with participatory research methods. We are also anticipating that students from the University of Peradeniya will be involved in this learning activity with the Canadian students. The results of the field work will be provide input for rapid prototyping and testing of ICT-enhanced services, which will overlap with but also extend beyond the three week period. A Sri Lankan based graduate research assistant will continue to liaise with the communities and collect qualitative data during the prototyping phase for up to six months. In addition the second year of the partnership will create an online presence (project portfolio) to provide an interactive platform to share reflections on emerging partnership models, to disseminate resource material (working documents, reports, links); to highlight project developments, preliminary results, and to invite discussion about emerging best practices with other communities of practice around the world.

The third year of the project will do three things: first, we will reflect on and critique findings from the integrated action research study. As part of this process we will draw on the “partnership synergy

model” developed by Lasker, R, et al., (2001) to critically evaluate the collaboration potential of the partnership. Second, we will work together to propose a model for technology-enhanced knowledge mobilization that integrates local communities of practice in partnership with local university, government, and non-government partners; in relation to this, the partnership will also develop a training strategy to transfer capabilities to local communities to enable rapid development and evaluation of technology-enhanced services to address emergent needs and knowledge acquired of local agricultural communities of practices. By involving research assistants and new scholars across a range of activities over the three years, the partnership will build research capacity in Canada and in Sri Lanka that will confer benefits beyond the project itself. The third phase will also include the development of an ongoing (legacy) partnership arrangement to support graduate student training in Sri Lanka and to create opportunities for Canadian scholars and students to advance their experience and expertise in fostering international research and development partnerships.

The knowledge mobilization plan for the final year includes two events. The first is a symposium at the University of Peradeniya that will include co-applicants, partners, and representatives of the multiple communities involved. This symposium will be an opportunity for stakeholders to learn from the various studies, to evaluate and comment on the prototype services developed for the agricultural community. Following that, an invitational symposium will be held in Canada to share the knowledge that emerged from the partnership development. This symposium will focus on the challenges and opportunities of cross-sector and inter-disciplinary partnerships for communications and technology in the agricultural sector.

Challenges

A cross-sector research team operating across international boundaries and multiple time zones is a significant challenge to undertake. Day to day project management will be shared between University of Alberta and LIRNEasia. Local university students in Sri Lanka will work under the supervision of our faculty member from the University of Peradeniya. Members of the Canadian research team will visit Sri Lanka each year, for varying periods depending on the stage of the research project. The University of Alberta has worked with LIRNEasia since 2006 and we have used a variety of real-time and asynchronous tools (Skype, email, etc.) for communication to coordinate activities and carry out project management duties. The field work and ICT prototyping will each be led by a senior scholar with relevant experience, who will also provide mentorship to the emerging scholars and research assistants.

Local logistics and arrangements can be challenging in Sri Lanka but the infrastructure (transport, power) is suitable for this project. The University of Alberta has conducted five previous research visits to Sri Lanka since 2006 and we are confident that the partnership will provide excellent access, support, and safe conditions for field visits that will include faculty members and research assistants.



Family name, Given name

Gow, Gordon

Intended Outcomes of Proposed Activities

Elaborate on the potential benefits and/or outcomes of your proposed research and/or related activities.

Scholarly Benefits

Indicate and rank up to 3 scholarly benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Enhanced research collaboration	
2	Enhanced research methods	
3	Knowledge creation/intellectual outcomes	

Social Benefits

Indicate and rank up to 3 social benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	New or enhanced partnerships	
2	Training and skill development	
3	Environmental outcomes	

Audiences

Indicate and rank up to 5 potential target audiences relevant to your proposal.

Rank	Audience	If "Other", specify
1	Academic sector/peers, including scholarly associations	
2	Students	
3	NGO and community organizations	
4	International audiences	
5	Practitioners/professional associations	

Participants Involvement

The success of this project depends on the combined expertise of all participants. We need people who understand how to build relationships with community stakeholders in Sri Lanka; who understand the challenges of knowledge mobilization in agricultural extension services; partners who have technical and programming skills and who can train others in these skills; those who know how to develop and teach methodology; those who understand the local context and social structures in Sri Lanka; and those who can provide intellectual and strategic leadership to the project.

Dr. Gordon Gow is Associate Professor in Communication and Technology, University of Alberta. He has experience working in information technology for development (IT4D) projects in Sri Lanka since 2006. His research focus is on deploying low cost, sustainable communication services for communities of practice through his Mobile Applications for Research Support (MARS) Lab at the University of Alberta. Dr. Gow will administer the grant and play a central role working with the Sri Lanka Department of Agriculture and LIRNEasia to establish technical capabilities and training for deployment and evaluation of communication technology and services.

Dr. Naomi Krogman is an Associate Professor in Rural and Environmental Sociology at the University of Alberta. She has worked or supervised graduate students in a variety of rural community settings, including farming or resource-dependent communities in Lesotho, El Salvador, Uganda, Zimbabwe, and Canada where she has examined local mobilization around land or resource management practices. Dr. Krogman recently won the Killam Award at the University of Alberta for Excellence in Mentoring. She will provide intellectual leadership in participatory methods and social practices theory, as well as a graduate student mentorship role in the partnership.

Dr. Mary Beckie is an Assistant Professor in the Faculty of Extension at the University of Alberta and holds an interdisciplinary doctorate in Sustainable Agriculture and Rural Development from the University of Saskatchewan. Over the past fifteen years her work has focused on sustainable community development and community-based resource management, particularly as relates to agriculture and food. Her role in the partnership will be to provide intellectual leadership in the area of knowledge mobilization for sustainable agriculture. Her experience in community-based research will provide important contribution to governance and collaboration.

Dr. Helen Hambly-Odame is Associate Professor in the Capacity Development and Extension program of the School of Environmental Design and Rural Development, Ontario Agricultural College, University of Guelph. Her scholarly work focuses on communication and learning processes in agriculture, environment and rural development, both internationally and in Canada. Her contribution to the partnership will include intellectual leadership in farm radio, agroforestry extension, gender and agriculture in the information society, and systems of innovation in agriculture, especially with respect to knowledge management and communication.

Nuwan Waidyanatha is Sr. Research Manager, LIRNEasia with LIRNEasia. He has a background in Operations Research and Computer Engineering, and has been working in the ICT4D field since 2005. Much of his research with LIRNEasia takes place in the Asia Pacific but he collaborates with partners around the world. He actively contributes to several free and open source software communities and holds an official position with the Sahana Software Foundation. He will play a key role in managing the

partnership from Sri Lanka and working with Dr. Gow to establish the ICT testbed and evaluation methodology for the project.

Dr. Eresha Mendis is Senior Lecturer in the Faculty of Agriculture at the University of Peradeniya, where she specializes in food safety and toxicology with agricultural commodities. She is currently involved in research dealing with farmer awareness on pesticide usage and identification of safety issues resulting from improper usage of pesticides. Dr. Mendis will contribute to the partnership through her involvement with agricultural communities of practice in Sri Lanka, establishing connections with those communities and facilitating field work, providing mentorship to graduate students and research assistants, as well as knowledge mobilization activities in the South Asia region.

Partner Organizations

Dr. Rohan Samarajiva is Chair and CEO of LIRNEasia. **LIRNEasia** is a regional not-for-profit that focuses on creating and disseminating independent, useable, actionable knowledge, through applied research, on documenting and disseminating regional best practices, on training and on short-term advisory assistance to governments/parties who request it. LIRNEasia is an influential organization and will play a key role in partnership development with other Sri Lanka partners as well as contributing expertise and knowledge mobilization capabilities to the partnership.

Dr. Rohan Wijekoon is Deputy Director, Communication, Extension and Training Division, Sri Lanka Department of Agriculture. Under his leadership, his unit has played a key role introducing new ICT into agricultural extension in Sri Lanka through its toll free agriculture advisory service and award-winning cyber-extension programs. The Centre will contribute expertise and community networking to the partnership, and provide support for the prototyping and pilot project activities.

Dr. K. Samarasinghe is Dean, Faculty of Agriculture, University of Peradeniya. The university is a leading institution for agricultural education in Sri Lanka, consisting of eight departments representing a cross-section of disciplines related to agriculture. The Faculty employs 119 permanent academic staff (89 PhDs on staff) and 250 academic support staff. The Faculty will provide an academic home for the partnership in Sri Lanka and provide access to students, faculty members, and contribute support for research and knowledge mobilization activities.

Dr. Katy Campbell is Dean of the Faculty of Extension at the University of Alberta. The Faculty supports community-engaged research and graduate study in the areas of communication, social sciences, linguistics, community development, and non-traditional learning. The Faculty will provide cash contribution to support this partnership and provide intellectual leadership in communication and technology for community-university partnerships and, more broadly, in the scholarship of community-university engagement.

Dr. Brent Swallow is Chair of the Department of Resource Economics and Environmental Sociology at the University of Alberta. The research of staff and students in the REES is focused in the areas of Agricultural Economics and Business; Resource/Environmental/Forestry Economics and Rural/Resource Sociology. The Department will provide a cash contribution to support this partnership and provide intellectual leadership in agricultural economics and environmental sociology.

Formal Partnerships

In September 2011 three University of Alberta faculty members and one graduate student, members of the research organization LIRNEasia, the Dean and faculty members from the College of Agriculture at the University of Peradeniya, and senior representatives from the Extension and Training Division of the Sri Lanka Department of Agriculture met in Sri Lanka to discuss and investigate the possibilities of working together to discuss ideas for a partnership arrangement that would support knowledge mobilization for sustainable farming practices. In those meetings we learned about each others' interests and concerns related to information technology, extension services, and local agricultural communities of practice. We also used that time together to meet with local community stakeholders (including extension service officers, farmers, students at the University of Peradeniya).

This partnership development grant proposal arose out of those meetings held in September 2011. However, initial discussions toward the partnership development process trace back to April 2011 when the University of Alberta and LIRNEasia developed an initial project proposal. In May 2011 we were awarded a seed grant from the Kule Institute for Advanced Studies at the University of Alberta to carry out preliminary research in support of early partnership building activities (that funding provided support for the meetings in Sri Lanka in September 2011).

The partnership meetings in September 2011 confirmed interest from key partner organizations in Sri Lanka: University of Peradeniya, Extension and Training Division of the Sri Lankan Department of Agriculture, and LIRNEasia. Not all organizations identified herein are contributing formally to the development of this proposal but it is our hope that we will be able to forge close working relationships with FrontlineSMS, Freedom Fone, and Ushahidi as the partnership activities unfold over the three phases identified in this proposal. Meetings between research partners are continuing with each of these organizations with that goal in mind.

The governance structure for this partnership is built into the structure of the activities described in this proposal. Annual research meetings will include time allotted for partnership and governance discussions to maintain leadership roles and to ensure that collaborative decision making is taking place in an equitable and effective manner.

All key partners identified in this proposal have been identified in the proposal development and individuals associated with partner organizations will assume responsibility for leadership in each of the working groups. Other contributors (FrontlineSMS, FreedomFone, Ushahidi) will support the partnership by providing guidance and advice on technical matters related to the communication technology in developing contexts, as well as input on best practices in collaborative working arrangements with local communities using these technologies.

We believe that the commitment of the co-applicants and partners will enable us to develop a cross-sector, interdisciplinary model to examine the potentiality for the adoption and development of sustainable farming practices through a technology-enhanced knowledge mobilization strategy involving low cost, widely accessible communication technologies. The initial workshop planned for July 2012 will produce a working charter among partner organizations to define roles and responsibilities in relation to the project. During the first phase, partners will work closely together to identify communities of practice and develop collaborative work plans that will serve as an integrated action

research strategy. In the second phase, partners will cluster into two primary work groups, with one group focused on knowledge mobilization practices within farming communities and the other work group focused on technology prototype development, testing, and evaluation. The two groups will work together in a tight iterative arrangement intended to foster rapid prototyping and evaluation with the local communities. The second phase holds great potential to identify new knowledge mobilization strategies for sustainable farming practices that can be community-led and sustained over the long term.

Why partnership approach is appropriate:

Knowledge mobilization can be viewed as a social practice that is shaped by the availability and use of communication technology and involves skills, experience and understanding (Tsui et al, 2006). Similarly, those involved in movements to promote sustainable farming can be viewed as part of a complex community/communities of practice implicated in a diverse set of domains that establish conditions by which knowledge can be effectively mobilized. As a result, a research partnership intended to introduce and evaluate information and communication technology must be equipped to address the complex social conditions under which knowledge is mobilized. Our proposal is for a partnership that works toward co-creation and evaluation of effective approaches to enable communities to advance sustainable farming through capacity building at the local level. Partners identified for this project have been carefully selected for the important role they will play in assisting each other to recognize and address the complexity of these socio-technical practices through an integrated action research strategy.

A partnership approach is appropriate for this project because it brings together stakeholders from all sectors to engage in an inter-disciplinary, cross-sector initiative. It provides an opportunity for all partners to expand research capacity and to develop expertise in working together through collaborative arrangements that will align a diverse array of knowledge and skills into an integrated research model. For example, understanding local conditions requires partners on the ground in Sri Lanka who are familiar with socio-political conditions. Developing effective methods and approaches to studying knowledge mobilization practices requires partners with access to local communities and expertise in field research techniques. Creation of technological prototyping and evaluation requires partners with technical expertise and who are also sensitive to knowledge about the social embeddedness of technology use and its impacts. Partners with access to regional research and support networks are also vital to the success of the project.

How do partners participate in intellectual leadership of the partnership:

Each year partners will participate in a research meeting, as described in the proposed activities of the partnership development process. During the research meeting, time will be allotted for the partners to meet and develop work plans that will include provisions for leadership opportunities and collaborative decision making. Currently the key partners identified in this proposal have all contributed to development of the proposal, but we expect that these roles will continue to evolve and mature over the life of the project. The success of the partnership depends on the expertise of each of its co-applicants and collaborators to contribute the necessary specializations. As noted above, where one partner brings expertise in social research methods, another brings expertise in technical implementation. Where one brings leadership in terms of working with local communities to carry out field studies, another brings leadership in terms of working with regional and international organizations to establish connections to larger communities of practice. The academic partners in the project will also play a role in fostering

intellectual leadership among research assistants and new scholars, contributing to a wider set of training and mentoring objectives.

How do partners benefit:

The key partners identified in this proposal will benefit from their participation in the activities of the proposed partnership. All will benefit from participating in the international and cross-sector network that is being developed through this project. For each of the partners, the activities contribute to the aims and goals of the institutions. For example, the University of Alberta and Faculty of Extension academic plans place emphasis on community engagement and the scholarship of engagement. The Graduate Program in Communication and Technology at the University of Alberta has been promoting the use of mobile communications in community-based research through its Mobile Applications for Research Support (MARS) Lab. In the Faculty of Agriculture, Life Sciences and the Environment (ALES), this project is compatible with three of their four key strategic areas of direction, including healthy human environments, sustainable land, forests and water management, and cultivating global food systems. As supported in the ALES academic plan, the SSHRC partnership grant can provide more opportunity for undergraduate/graduate research experience, and involve interdisciplinary collaboration, international and community-level engagement.

The Capacity Development and Extension program of the Ontario Agricultural College, University of Guelph, has two major areas of concentration: adult learning and capacity building, and communication for social and environmental change. The proposed project complements these two areas of emphasis. Guelph's research projects involving information and communication technologies (i.e., radio, video and social media) for smallholder agricultural innovation in Ghana and Bangladesh are especially relevant for knowledge exchange. IDRC and CIDA have supported, or are currently supporting, affiliated projects in agricultural extension and innovation systems analysis led by retired professor Dr. Jana Janakiram (southern India/Sri Lanka), post-doctoral researcher Atarahul Chowdhury (Bangladesh) and associate faculty member Dr. Laxmi Prasad Pant (India and Nepal). The university also hosts the Don Snowden Program in Communication for Social and Environmental Change, which facilitates participatory media teaching and research projects in rural and remote areas of Canada and the developing world.

LIRNEasia aims to improve the lives of the people of the emerging Asia-Pacific by facilitating their use of ICTs and related infrastructures, and to enable those uses through the conduct of policy-relevant research, training and advocacy with emphasis on building in-situ expertise. This project will contribute to LIRNEasia's emerging research interests on the use of communication technology in agriculture following from pioneering studies done on the use of mobile phones in agriculture value chains.

The Faculty of Agriculture at the University of Peradeniya has a mission to strive for excellence in education, research and outreach in the agriculture sector as essential building blocks for the development of more sustainable agri-food systems. The University is recognized as a pre-eminent agricultural university in Sri Lanka with close ties to Sri Lanka's Department of Agriculture. The Faculty has contributed important work in recent years to understanding the role of new communication technologies in agricultural extension.

The Extension Training Division of the Sri Lanka Department of Agriculture has played an important role introducing new communication technologies in the country. The Audio Visual Centre located in Dambulla has, under the leadership of Dr. Wijekoon, pioneered the introduction of cybercentres and, most recently, social media (see: www.goviya.lk) as part of its knowledge mobilization strategy working with local farming communities. The Department is set to embark on a new phase with the introduction of a National Agricultural Information and Communication Centre. The training and mentoring that is provided through this partnership will contribute to the development of community-based agricultural extension services that use appropriate, affordable communication technologies.

Integration of expertise:

The description of proposed activities of the partnership outlines a governance structure that integrates the complementary expertise of the partners. The University of Alberta and University of Guelph are large research-intensive organizations that bring socially-informed perspective on sustainable farming with experience in international field work. The University of Peradeniya is located in Dambulla in central Sri Lanka, at the heart of the agricultural sector in that country and works closely with the Department of Agriculture on a range of initiatives including studies to examine the social impact of new communication technologies on farming communities. LIRNEasia provides expertise in social impact of new communication technologies in the South Asia region. It has received funding in the past through the Canadian International Development Research Centre (IDRC) and is a widely respected organization in the international ICT research community, with a strong research track record and excellent connections to regional research and policy networks.

The Extension and Training Division of the Sri Lanka Department of Agriculture has experience with the use of communication technologies to enhance agricultural extension services. Representatives of each of these partners are actively engaged in the activities of the partnership, by conducting research studies, planning and hosting annual research meetings and symposia, and by working closely with communities of practice to help build local capacity.

Anticipated challenges:

Several challenges to the partnership can be anticipated. First, language barriers will pose a challenge when working with local communities. We expect these can be addressed through the assistance of translators and English-Singhalese bilingual research assistants from the University of Peradeniya. These research assistants will work collaboratively with partners as well as Canadian research assistants involved in the project. Second, access to local communities will be facilitated through our Sri Lankan partners who have longstanding working relationships in this area. Third, access to and deployment of technology for the project will be facilitated through the Department of Agriculture, which expressed its interest in supporting the project during our meetings in September 2011.

The annual partner meetings will also set aside time to develop a yearly strategy for confirming and/or securing further cash/in-kind contributions to support the activities of the partnership. Because this is a partnership development initiative, we expect to be devoted to exploring creative ways to secure additional funding through various agencies, including international development foundations and granting organizations. Securing additional funding for the partnership will serve two key purposes: additional funds to help disseminate research findings at international, national, and local conferences; and by helping to provide funds for the development of a larger Partnership Grant through agencies such as SSHRC as part of a long term project to scale up and expand the partnership regionally.

Contributions Plan

University of Alberta Faculty of Extension is prepared to contribute \$9000 toward salary for graduate research assistant/project coordinator over the three years of the project.

University of Alberta Faculty of Agriculture, Life, and Environmental Sciences, is prepared to contribute \$8700 for a stipend for a graduate student.

University of Alberta Faculty of Extension will contribute \$5000 to support the knowledge mobilization symposium in Canada during year three. Additional funding for the symposium will be requested through a matching grant from the Faculty of Agriculture, Life and Environmental Sciences.

University of Guelph will contribute \$6000 in-kind for access to and use of Dr. Hambly-Odame's rural media lab in support of the project. In addition, the University of Guelph will contribute \$1500 cash toward travel costs associated with the project.

Extension and Training Division of Department of Agriculture (Sri Lanka) will contribute up to \$46,670 of in-kind support to the partnership through a combination of staff time and travel costs to assist with field work and project oversight, as well as \$5400 in-kind support for use of computer equipment, AV facilities, and meeting space in support of the project.

University of Peradeniya will contribute \$8,190 for in-kind support to the partnership through staff time for project oversight and knowledge mobilization activities related to the project. The University will also contribute \$9600 in-kind support for meeting space and other resources to support field work and knowledge mobilization activities in support of the project.

LIRNEasia will contribute \$26,010 for in-kind support to the partnership through allocation of staff time to assist in planning field research and logistics, symposia, and other knowledge mobilization activities related for the project. LIRNEasia will also contribute \$3600 in-kind for office space and facilities in support of the project.

Funding to be sought

The partnership will apply to the University of Alberta International for a Group Education Abroad Award (up to \$750 per student) to supplement costs Canadian students to travel to Sri Lanka for participation in field research as part of a study abroad course in year two. In addition, Gow, Beckie and Krogman will apply to the University of Alberta's special programs in the Registrar's office for a start-up grant (est. \$25,000) to develop a field course for students in Sri Lanka in year two.

The partnership will apply to the University of Alberta Conference Fund for funds to assist with the Knowledge Mobilization Symposium (approx. \$10,000) in year three. LIRNEasia and University of Peradeniya will seek additional travel support through IDRC and/or other international funding sources to supplement travel costs associated with attendance at the Canadian symposium in year three.

Training and Mentoring

Applicants and collaborators from Canada and Sri Lanka have all successfully conducted funded research from proposal stage to knowledge mobilization. Both Krogman and Beckie have designed and supervised students in study abroad programs overseas using a variety of methods similar to those proposed in this project. Through his Mobile Application for Research Support (MARS) Lab at the University of Alberta, Dr. Gow works with students and community groups to train them on the use of mobile communication devices and software for research projects. Waidyanatha has experience in training and supervising research assistants in Sri Lanka and India on a number of projects involving information and communication technologies for Development (ICT4D).

The partnership will create training opportunities for several graduate research assistants over the course of three years. The Univ. of Alberta and Univ. Guelph will employ two graduate research assistants each year of the project plus one graduate student for project management. LIRNEasia and University of Peradeniya will work together to involve two student research assistants each year over the course of the project, as well as a PhD student with previous experience working with the Department of Agriculture on ICT in agriculture. The project will provide opportunities for the graduate students to conduct field research and to enrich their educational experience and training with the unique challenges presented by the Sri Lankan context.

In year two, the project will create opportunities for Canadian graduate students to gain experience doing field work in Sri Lanka as part of a study abroad program that will be developed and offered at the University of Alberta in conjunction with the partnership. Students who register in the program will work together in an international collaborative team with the University of Peradeniya and be trained in cultural sensitivity, research methodology, human ethics protocols, and use of ICT for development. It is intended that findings from the project and material developed for the study abroad program will be developed in year three to establish a legacy partnership program that will offer Canadian graduate students an opportunity to gain experience in ICT4D research in Sri Lanka through a joint educational and training initiative with LIRNEasia and University of Peradeniya.

An undergraduate student from the University of Alberta will be employed for each year of the project to develop and maintain a web presence for the partnership, gaining experience in social science research practices and knowledge mobilization through this role.

Community stakeholders will be involved in field research activities and invited to annual workshops to be held in conjunction with annual partnership meetings. These workshops will serve as a locus for reciprocal learning where community input and practices blend with academic research approaches to produce enriched learning for all involved. In addition, the symposium in year 3 at the University of Peradeniya will be directed at training and capacity building with the community stakeholders to encourage self-directed and sustained innovation in knowledge mobilization activities initiated by the project.

Knowledge Mobilization Plan

Beyond its research focus on knowledge mobilization in agricultural communities of practice, the partnership development project will include its own knowledge mobilization strategy. The goal of this strategy is to promote networking and co-creation of knowledge across the partners, community stakeholders and beyond to include scholars and practitioners in related areas of community-university engagement and information and communication technologies for development (ICT4D).

Beginning immediately and ongoing throughout the project, meetings, workshops, and symposia will bring together participants, partners and stakeholders where appropriate to engage with project activities through collaborative activities and interaction.

In the first year of the project there will be a week-long series of research meetings in Sri Lanka involving all partners and stakeholders. This series of meetings will provide an opportunity for all involved to develop working relationships of trust and mutual respect in order to facilitate sharing of perspectives and knowledge among the partners. This internal knowledge mobilization process is a vital step toward further collaborative activities, and will provide a foundation for both the integrated action research strategy and a comprehensive knowledge mobilization strategy that will unfold over the course of the partnership development project.

In the second year, fieldwork will be carried out with communities where prototyping and related workshops and consultations will take place. The technology prototyping and testing will inform the creation of a training and evaluation protocol that will be shared with the communities and with the larger communities of practice that work with ICT4D through an online project portfolio (e.g., website). The online component will extend into year three and beyond to provide an interactive platform to share reflections on emerging partnership models, to disseminate resource materials (working documents, training materials, instruments, protocols), and to highlight project developments, preliminary results, and invite discussion from academic peers and practitioners from around the world about emerging best practices in the area. The portfolio will also provide opportunities for non-participants (such as international funding agencies and NGOs) to learn about the work being undertaken, to contact partners to provide comment and feedback, and to foster new opportunities to expand the partnership over the longer term.

Also in year two, graduate students who participate in the field research as part of the study abroad program will be encouraged to prepare presentations about their experience, either as a panel or individually, for a suitable venue such as the annual Canadian Communication Association conference and the Young Scholars division of the annual Communication Policy Research (CPR) South Conference.

The final year of the project will focus on partnership evaluation and knowledge mobilization activities. A workshop/symposium, that will include co-applicants, partners, and community members from years one and two, will take place in Sri Lanka at the University of Peradeniya. This symposium will be an opportunity for stakeholders to learn from the various studies, to evaluate and comment on the prototype services developed, and to suggest future directions for the partnership. Following that event, an invitational symposium will be held in Canada to share knowledge that emerged from the partnership development process. This symposium will focus on the challenges and opportunities of cross-sector and

inter-disciplinary partnerships for knowledge mobilization through innovative communication strategies. Disciplines represented might include agricultural science, rural sociology, community development, communications, and human geography. The third year of the project will also include the creation and dissemination of a legacy partnership plan to support the development of post-graduate training and study abroad opportunities for Canadian students seeking experience in ICT4D projects.

In addition to the project workshops and symposia, we plan to carry out capacity-building activities with the communities involved in the project. With assistance from the Audio Visual Centre of the Department of Agriculture (AVC), we will develop training materials and methods to enable local communities to develop and test their own innovations related to knowledge mobilization. For example, the AVC has extensive experience in creating multimedia materials in support of agricultural extension. We would look to develop the partnership in a direction that enable the creation and distribution of these materials on an open access basis with both our Sri Lankan partners as well as international contributors such as FrontlineSMS, Ushahidi, and Freedom Fone.

Where appropriate, findings from the project will be shared with various levels of government in Sri Lanka as well as with regional and district agricultural services offices through the involvement of the Sri Lanka Department of Agriculture. We intend to report activities and findings of the project through conferences and events in the South Asia region through our LIRNEasia partner, which will also bring the partnership to the attention of policymakers in the wider South Asia region.

Regarding academic peer activities, we intend to present and publish in traditional academic settings such as conferences and journals at local, national, and international levels. We will seek opportunities to propose working groups or discussion groups on international partnerships for knowledge mobilization in agriculture at venues such as the annual Agricultural Extension Conference in Peradeniya Sri Lanka; the International Conference on Information and Communication Technologies and Development (ICTD); the International Conference on Sustainable Agriculture, Environment and Forestry; the International Symposium of Society and Natural Resources; and, the Rural Sociological Society.

We plan to publish our results in a range of journals across disciplines. These include publications that focus on the impact of communication technology in development contexts, such as *Information Technology for Development*, *Information Technologies and International Development*, *Journal of Technology in Human Services*, and journals that focus on agriculture and development, such as the *Journal of Agricultural and Food Information*, *Journal of Sustainable Agriculture*, *American-Eurasian Journal of Sustainable Agriculture*, *The Journal of Rural Studies*, and *Rural Sociology*. We will ensure that some of the output of the project is published in open access journals, such as the *Journal of Rural and Community Development* and *Asian Journal of Agricultural Science*. We will also look to publish selected findings in wider social sciences journals concerned with the impact communication technology on society, such as *New Media and Society* and the *Canadian Journal of Communication*, as well as those that address community-university engagement.

When applicable, periodic news briefs or summaries of the partnership will be shared with universities and partner organizations for publication in newsletters, websites, blogs, social media, and other public venues.

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Family name, Given name

Gow, Gordon

Expected Outcomes Summary

Describe the potential benefits/outcomes (e.g., evolution, effects, potential learning, implications) that could emerge from the proposed research and/or other partnership activities.

In this project we are proposing a cross-sector and inter-disciplinary partnership that involves a collaboration among researchers, partners, communities, local and national government institutions, and non-governmental organizations (NGOs). Our knowledge mobilization strategy targets several key areas of interest: development of theory (e.g., social practices, information and communications technologies for development--ICT4D), sustainable agriculture in developing countries, practice and policy related to sustainable ICT development, and curriculum development and training in action research settings. The partnership intends to contribute to scholarly, professional, and community development discourse through the development of reports, symposia, and training strategies.

The partnership and the results of our work will be of particular interest to those involved in community-university engagement, ICT4D, and those involved in innovation for agriculture extension services. In addition, there is a large and growing community of practitioners working with open source platforms to support community-based ICT innovation in both developed and developing countries.

Although the partnership will be primarily situated in Sri Lanka, its governance model and working methods are expected to contribute to other international collaborative projects and to create opportunities for new research assistants and graduate training for students in Canada.

The following is a list of key research outcomes of the partnership development process:

- *Formal partnerships to support community-based innovation in the digital economy
- *Documentation and critical analysis of the roles and responsibilities of local communities and agricultural extension services working together to develop communication strategies for knowledge management, particularly in sustainable agriculture
- *Improved understanding of knowledge sharing practices in local farming communities and implications for design of enhanced communication services
- *Prototype designs of enhanced communication services that can be implemented at low cost and with minimal training by local communities;
- *Critical assessment of the partnership model to facilitate technology-enhanced communities of practice in developing countries;
- *Policy recommendations for sustainable ICT use in the agricultural sector;
- *Expanded research capacity at University of Peradeniya in Sri Lanka;
- *Expanded inter-disciplinary research capacity at the University of Alberta through the training of young scholars and graduate students;
- *Increased opportunities for Canadian researchers to work on and lead future international partnerships projects involving cross-sector and inter-disciplinary projects.

DRAFT
LETTER OF AGREEMENT
BETWEEN

UNIVERSITY OF ALBERTA
UNIVERSITY OF GUELPH
LIRNEASIA, SRI LANKA
UNIVERSITY OF PERADENIYA, SRI LANKA
SRI LANKA DEPARTMENT OF AGRICULTURE

and

THE APPLICANTS/COLLABORATORS

GOW, GORDON
BECKIE, MARY
KROGMAN, NAOMI
HAMBLY ODAME, HELEN
WAIDYANATHA, NUWAN
MENDIS, ERESHA
WIJEKON, ROHAN

This agreement shall be effective from November 30, 2011 (effective date)

The parties agree that they wish to collaborate on the project entitled “**Partnership development to explore innovative uses of low cost communication technology for knowledge mobilization in agricultural communities of practice**” the details of which are attached hereto as Schedule A. Further elaboration of the details of engagement is noted in the SSHRC Partnership Development Grant Application.

The parties agree that the term of this agreement shall begin on the Effective Date and terminate four (4) years thereafter.

In witness whereof the representatives of the Parties, having authority to bind their respective organizations, have hereunder affixed their signatures.

[LIST TO INCLUDE ALL PARTNER INSTITUTIONS]

NAME OF PARTNER INSTITUTION

NAME OF APPLICANT

TITLE

DATE

SCHEDULE A

“Partnership development to explore innovative uses of low cost communication technology for knowledge mobilization in agricultural communities of practice”

AIM

The aim of this proposal is to establish and support the activities of an international and multi-organizational partnership among the University of Alberta, University of Guelph, LIRNEasia, University of Peradeniya, and the Sri Lanka Department of Agriculture.

PURPOSE OF THE PARTNERSHIP

The purpose of this partnership is to promote innovative approaches to knowledge mobilization for sustainable farming practices through low cost, widely accessible information and communication technologies. It involves a multi-phase project over three years to develop the partnership and work together to address the complex problem of knowledge mobilization in agricultural communities of practice through the interaction of multiple stakeholders from social sciences, communication and technology, agricultural studies, and agricultural extension services.

OVERALL GOAL

The goal of the partnership is to understand how cross-sector and inter-disciplinary partners can work with local communities, regional and national institutions, and international organizations to promote knowledge mobilization for sustainable farming practices through low cost, widely accessible communications technologies and services.