

Progress Report as of May 15th 2010

05-B-07	<i>Development of local capacities on environmental friendly agricultural technologies through knowledge management process between Bhutan and Costa Rica</i>	
Thematic area	Sustainable Chains of Production and Consumption	
Partner countries	Costa Rica - Bhutan	
Lead organization	National Institute of Innovation and Agriculture Transference Technology (INTA), Department of Transference and Information Technology (TIT) in Costa Rica	
Partner organization	The Information and Communication Services (ICS) of the Ministry of Agriculture and Forests in Bhutan	
Budget	PSC	\$581.898,24
	Counterpart	\$316.000,00
Execution period	August 2, 2008 - August 1, 2010	
Work plan execution	According to the plan	
Percentage of advance	The project has 90 % of advance at may 15 th, 2010	
Beneficiaries	Costa Rica: Leader farmers, member of Asociación Progresista de Productores de la Argentina (ASPPROA), Asociación de Gestores Locales del Caribe, Asociación de Productoras y Productores de Asentamientos Unidos, Asociación de Productores y Productoras Agroecológica e Industrial del Caribe (AGROECO), Asociación de Productores de Leche de Cuatro Esquinas (APROLECE) and the Fundación para el Desarrollo Sostenible de Osa	
	Bhutan: researchers and extension agents the Ministry of Agriculture and Forests (MoAF), RNR Information and Communication Services, MoAF, farmers in the pilot project sites of Limhukha, Gaselo, Lobesa.	

Overall Objective	Specific Objectives	Expected outcomes	Outcomes of the activities realized
To contribute with the competitiveness of the farming chains production, developing local capacities on knowledge management for the technological interchange, between Costa Rica and Bhutan	To consolidate and extend the services that lend both platforms (VERCON-Bhutan and PLATICAR-Costa Rica) to have a greater cover and impact, through the internationalization and sharing of components of information and communication services	Implement new information, communication services to support knowledge management for improved agriculture service delivery.	Agreement about the shared components and the services to develop in both platforms and validation with technicians and farmers from Bhutan and Costa Rica.
			Discussion and identification of possible agriculture technicians and researchers as per the commitment letters from various possible stakeholders in Bhutan.
			Adjusted chronogram & indicators of project for Bhutan and Costa Rica. Defined communication protocols between partners.
			Indexed with FAO-TECA (data-sheets of agricultural technologies)
			Indexed with SIDAL-IICA-CATIE (Confederation of Latin American Agricultural Libraries)
		Google indexed Forums, FAQ, activities calendar, news used by communities of practice participants in both VERCON Bhutan and PLATICAR-Costa Rica platforms	
		Integrated services between	Identified services for interchange responding to the goals of each

VERCON and PLATICAR platforms	country, identified and selected in both platforms
	Web portal structure and layout defined
	14 selected components responding to the each country requirements adjusted and interchanged: wiki, blog, guestbook, comments, integration TECA-SIDALC, Web Service for PNA, multimedia gallery, you tube channel, lecture detailed user management, glossary, PLIC, manager, glossary, research projects web cast, video.
	Joomla! CMS, MySQL, Apache, Linux and PHP selected as the development tools for both VERCON and PLATICAR, Costa Rica leading the development on both platforms
	Physical and virtual servers setup and running in both countries
	Joomla! CMS installed and configured. Joomla extensions installed and configured and others developed by the project also installed and configured
	Both PLATICAR and VERCON Bhutan Web portals running and validated. Document was prepared for the installation and configuration of the server and the web site.
	Hired an ICT Consultant in Bhutan to support the integration of VERCON and PLATICAR platforms
	Remote access to the server in Bhutan was implemented to make the integration supported by PLATICAR team from Costa Rica
The inter-phases of the web platforms of both countries to be translated to Spanish and English	Document about requirements, analysis and design completed, including documentation and development standards
	Software development provider contracted and software development on going, virtual development environment implemented
	Joomla! CMS 1.5.x extensions, modules and plug-in to integrate in both platforms selected, validated for compatibility and installed
	Joomfish and Joomla! Extensions Joomfish plugins installed and activated
Operating centers in Bhutan and Costa Rica for the knowledge management	Integration of the component multi-languages to the platforms
	Platform prototype with multi-language support is being validating with researchers
	Equipment and sellers identified, quotes gathered, selection matrix built to buy equipment
	Equipment technical specification sent to Bhutan, bought and installed same as in Costa Rica
	One new Operating Knowledge Management Center in ICS Bhutan.

		Bhutan was migrated from a closed source software (owner) to an open source software (joomla!).	
		One new Operating Knowledge Management Center in FICOSA, south region in Costa Rica	
		IT from ICS-MoA Bhutan visited Costa Rica and trained in the operation and administration of the Knowledge Management Center	
To develop local capacities in information, communication and methodologies of knowledge management, for a better appropriation of the technological knowledge of technicians and farmers	Technicians with basic abilities in the mediation, facilitation, negotiation, pedagogy, TIC use and media production for different target groups	Preliminary training proposal in methodologies necessities in each country. Work done during the mission with Costa Rica team and Bhutan counterpart.	
		Proposal elaborated with the Atlantic Region beneficiaries.	
		Made an inventory of materials on information and communication in INTA-Costa Rica and in Bhutan. Inventory of the methodologies, identification of gaps and priorities necessary for each country. Packaging of the methodologies in different format (documentary and print) were outsourced in Bhutan.	
		20 farmers (female and male) trained in ICT and PLATICAR platform use in GECO Huetar Atlantic	
		5 livestock researchers of INTA and 3 staff members (researchers) of National Chamber of Meat Producers-CORFOGA-, National Chamber of Milk Producers-NC-Leche, and University of Costa Rica trained in the elaboration of training modules, following the protocol designed for this purpose.	
		23 different events realized in methodologies for ICT and Knowledge Management, with the participation of 30 farmers and researchers	
			Researchers, extension agents and ICT staff trained in Bhutan on information and communication and research methodology. This training was given by FAO in the context of technical cooperation for Bhutan.
			One person from Bhutan visited Costa Rica and one person from Costa Rica visited Bhutan to share ICT, IT and KM methodologies
			40 academician, extension, researchers and farmers trained in mediation, ICT and pedagogy methodologies, event conducted by INTA, MoA with the facilitation of Radio Netherlands Training Center, realized in Costa Rica.
		Technicians with skill for use of both platforms, as a mechanism for the interchange of	Producers, researchers and extension agents sensitised in the use of the platforms as a mechanism to share technologies and its services (staff from ICS-MoA, 20 researchers from RNR Jakar Center. 5 leader

	technology and of the knowledge management methodologies	<p>farmers representing 5 farmers organizations in Costa Rica with skills for the use of the platform). And 50 students from college and university informed in the use of the platform as a tool to share technology.</p> <p>Strategy elaborated to learn the use of Web 2.0 information and communication tools to share information in both VERCON and PLATICAR platforms, done by Costa Rica and Bhutan team.</p> <p>5 organizations were provided with access to internet and trained to administer their own web site in the PLATICAR platform</p> <p>15 researchers from INTA trained in the use and facilitation of the services in PLATICAR platform</p>
	Develop of the protocols in mediation, facilitation, negotiation, pedagogy, TIC use and media production to operate the methodologies	<p>7 Protocols Developed for the use of the PLATICAR Platform services</p> <p>Security software and security infrastructure implemented in both platforms</p> <p>PLATICAR platform updated with technologies information and new services for knowledge exchange</p> <p>Knowledge communities in specific themes have begun to integrate and share information</p>
		The protocol for the administration of the new GECO was developed and adjusted in each case.
To promote sharing technologies oriented to sustainable practices in agriculture, improving knowledge management processes	Have documents of good practices in local agriculture in both countries	Technologies identified for each country. Work done during the mission with Costa Rica team and Bhutan counterpart in both countries. Technologies identified are: livestock, organic agriculture, integrated farms, natural resources.
		Technologies identified with the beneficiaries from the Atlantic Region in Costa Rica
		Inventory of the list of technology materials in INTA-Costa Rica and in Bhutan
		Compilation already existing technologies done in Bhutan and Costa Rica
	Didactic materials of the selected technologies, available in different ways to support the auto-learning of Spanish and English	<p>Validation of the didactic materials already done in each country with experts in respective field</p> <p>Materials available for beneficiaries in each country. Some materials as videos in process to be translated in English, to be share.</p>

		Technicians and leader farmers trained in sustainable agricultural technologies and in the use of the different didactic materials	20 women producers trained in “Hydroponic” as a friendly technology in Costa Rica
			20 producers (male and female) trained in organic agriculture technology in Costa Rica.
			200 technicians trained in livestock technologies in Costa Rica
			Alliances with 5 national agriculture organizations to impart training in environmental friendly technologies
			100 producers exchanged their technologies and share knowledge in agriculture as organic agriculture, livestock, and hydroponic, integrated farms.
			8 different methodologies exchanged and 175 producers and technicians trained in 255 participation in 5 regions in Costa Rica.

Photo Gallery



Needs Assessment Workshop



Needs Assessment Workshop



Project Team



Project Coordination Meeting



Researcher from Costa Rica in Bhutan



Team project in Jackar RNR Cenetr



Researcher with Organic farmers in Bhutan



Working in platforms integration



4 passants from Bhutan sharing knowledge with livestock farmers organization



Farmers trained in organic agriculture



Field day in Hidroponic technology



Farmers and technicians trained in ICT methodologies

Impact Indicators

Chart 1A. Impacts										
INDICATORS RELATED TO PEOPLE BENEFICIATED AND TRAINED										
Code	Indicators	Benin		Bhutan		Costa Rica		TOTAL		Comments
		M	F	M	F	M	F	M	F	
A59	Number of people educated in ICT use in rural communities			30	26	25	15	55	41	Close the digital gap

Chart 2A. Impacts						
OTHER INDICATORS						
Code	Indicators	Benin	Bhutan	Costa Rica	Total	Comments
A9	Number of families that improved their annual incomes			35	35	Friendly technologies
A63	Number of donors and countries showing interest in PSC concept		1	5	6	FAO, USA,CANADA,PERU,PANAMA
A64	Number of quotes in national7 international for PSC concept		1	1	2	FAO
A65	Number of alliances investing resources in sustainable development activities		8	5	13	IDA,UCR,MICIT,INTA,UMANITOBA
A66	Sustainable development impacts on projects and themes (result of evaluation of selected projects)			3	3	
A68	Funding by third parties to support PSC concept			1	1	FAO
B3	Number of new technologies packaged for sustainable production and developed		31	8	39	Hydroponic, biodigester, soil management, organic farming, pest management, fodder development, income generating activities,

						etc.
B13	Number of new hectares used for organic production			10	10	
B49	Number of area with sustainable production systems applied			25	25	
B50	Number of producers with (increased incomes by sustainable production systems			50	50	
D8	Number of women involved in decision making (increase)		26	58	84	
F11	Increase use of renewable techniques		1	1	2	Biodigester

Outcome indicators

Chart 1B. Outcomes										
INDICATORS RELATED TO PEOPLE BENEFICIATED AND TRAINED										
Code	Indicators	Benin		Bhutan		Costa Rica		TOTAL		Comments
		M	F	M	F	M	F	M	F	
B39	Number of producers applying new technologies or products of sustainable production (e.g. following training or exchange visits)			50	5	20	30	70	35	Working in pilots areas
B48	Improved access to knowledge/information on sustainable production			35	26	15	35	50	76	Sharing knowledge trough field days, ICT, workshops
E19	Number of people or organizations or institutions with improved skills and awareness on biodiversity conservation and sustainable use			75	30	35	65	110	95	Use of friendly tecnologies
Chart 2B. Outcomes										
OTHER INDICATORS										
Code	Indicators	Benin	Bhutan	Costa Rica	Total	Comments				
A16	Number of new products		31	8	39	New services in the platforms and new vegetable crops				
A17	Number of new services		18	20	38	Integration of platforms				
A18	Number of new information and communication services		13	12	25	Platicar and Vercon platforms				
A27	Number of online agricultural information platform		1	2	3					
A30	Number of records available in the Information systems		75	100	175					
A35	Number of technologies transferred between participant countries		4	4	8	Livestock, organic agriculture, horticulture				
A50	Number of initiatives generated through the experience of the Project execution		4	4	8	Livestock, organic agriculture, horticulture				
B11	Number of new knowledge management centers		1	2	3	One new in each country				
BX	Number of new KM center improved		1	2	3	One new in each country				
D5	Existing number of positive actions to improve the access for women to technology		8	4	12					

E17	Number of communities applying technologies or products that conserve biodiversity (e.g following training or exchange visits)		2	6	8	
E20	Number of alliances with private sector on biodiversity conservation and sustainable use		2	5	7	
F7	Number of new biodigesters operating		2	5	7	
F8	Number of new sustainable or more efficient energy techniques or practices installed(photovoltaic systems, solar cooking biomass, biodigesters)		1	1	2	

Output indicators

Chart 1C. Outputs										
INDICATORS RELATED TO PEOPLE BENEFICIATED AND TRAINED										
Code	Indicators	Benin		Bhutan		Costa Rica		TOTAL		Comments
		M	F	M	F	M	F	M	F	
A1	Number of direct beneficiaries (Training workers, others)			75	30	90	143	165	173	Improve gender equity
A36	Number of people trained in sustainable technologies			20	10	35	65	55	75	Improve gender equity
A42	Number of people trained			30	26	35	65	65	91	
A43	Number of people trained to be trained to be trainers			25	25	25	25	50	50	
A45	Number of people trained on technical skills			28	12	35	35	63	47	
A46	Number of people trained on communication and information technologies			20	15	25	35	45	50	
A48	Number of participants at needs assessments workshops			64	15			64	15	
A57	Number of people that are working in a productive activity related to the training			54	3			64	3	
B1	Number of small producers/farmer benefitted by the projects			60	30	50	75	110	105	Working in pilot areas
B18	Number of small producers/ farmers trained					35	65	35	65	
B19	Number of farmers trained on organic cultivation					20	20	20	20	Integrated crop farms
B20	Number of people trained on agricultural techniques					50	75	50	75	Livestock, horticulture, organic systems

Chart 2C. Outputs	
OTHER INDICATORS	

Code	Indicators	Benin	Bhutan	Costa Rica	Total	Comments
A4	Number of NGOs benefitted		1	4	5	
A7	Number of communities benefitted/participated in the project		5	25	30	Atlantic and South region in CR
A20	Number of governmental-academic partnerships			4	4	MAG,IDA,UCR,UNED
A26	Number of international experiences Exchange events		6	3	9	Study tours in BH and CR
A33	Number of methodologies for national, regional and local decision making adapted to Bhutan		33	3	36	Knowledge Management
A34	Number of methodologies for national, regional and local decision making adapted to Costa Rica		3	3	6	Knowledge Management
A41	Number of publications of good practices and training guidelines		3	3	6	Based on friendly technologies
A49	Number of organizations at needs assessments workshops		8	25	33	
A51	Number of governmental organizations benefitted		8	8	16	
B4	Number of friendly of friendly environmental technologies available in different media to be used for training target groups		33	3	36	Livestock, horticulture, hydroponic, organic agriculture
D2	Number of governmental organizations benefitted with better gender equity information for decision making process			5	5	
D3	Number of private organizations benefitted with better gender equity information for decision making process			10	10	