

A new relevance and better prospects for wider uptake of social learning within the CGIAR (findings from a stock taking exercise within the CGIAR)

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CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

Julian Gonsalves



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
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Working Paper

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Abstract

Relying entirely on survey information and personal exchanges with over 70 scientists from within the CGIAR network, this working paper attempts to achieve a better understanding of the scope of social learning related efforts undertaken in CGIAR and main issues of relevance to more current efforts, such as that planned by the CGIAR program on Climate Change Agriculture and Food Security (CCAFS). A wide range of methods was identified, where groups of people learn in order to jointly arrive at solutions to pressing food security problems. This methodological diversity is considered a strength given that they represent the different contexts that the research community is responding to. Relying on experiential evidence from professionals within the CGIAR network, the working paper further explores if the reformed CGIAR and the new structural and programmatic setup offer improved prospects for the inclusion of social learning approaches in CCAFS. A range of working definitions of social learning – from the literature – is proposed to meet the special needs/context of scientists. The stocktaking exercise also attempts to identify what is needed to foster an enabling environment for social learning. Key propositions are derived from the findings of the stocktaking exercise. Relying on secondary information provided by respondents, case overviews of exemplary and mature examples of social learning from within CGIAR were developed with the purpose of highlighting that CGIAR does already have a tradition to build upon in future work. Finally, an illustrative listing of current CGIAR projects provided to support the stocktaking objectives of this effort.

Keywords

Social learning; Climate change adaptation; Participatory research; Innovation platforms.

About the author

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Acronyms

AAS	Aquatic Agricultural System
ABCD	Asset-Based Community Development
ACIAR	Australian Centre for International Agricultural Research
ACM	Adaptive Collaborative Management
Ag/NRM	Agriculture/Natural Resource Management
AGRA	Alliance for Green Revolution in Africa
AHI	African Highlands Initiative
APIA	Adaptive, Participatory and Integrated Assessment
APRP	Arabian Peninsula Regional Program
ARC	Agricultural Research Council
ARD	Agriculture Research for Development
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
ASALs	Arid and Semi-Arid Lands
AWM	Agricultural Water Management
BMZ	German Federal Ministry for Economic Cooperation and Development
BSMs	Benefit-sharing Mechanisms
CA	Conservation Agriculture
CAEA	Commune Agro-Ecosystems Analysis
CAPRI	Collective Action and Property Rights
CBAM	Community Based Adaptive Management

CBM	Community-Based Management
CBOs	Community-Based Organizations
CBSS	Community-Based Seed Systems
CC	Climate Change
CCAFS	Climate Change, Agriculture and Food Security
CFC	Common Fund for Commodities
CG	Abbreviated for Consultative Group for Agriculture Research
CGIAR	Consultative Group on International Agricultural Research
CIAT	International Centre for Tropical Agriculture
CIFOR	Center for International Forestry Research
CIMMYT	International Maize and Wheat Improvement Center
CIP	International Potato Center
CLRRI	Cuu Long Delta Rice Research Institute
CLUES	Climate Change Affecting Land Use
CONSEDI	Council on Integrated Development Burundi
CORIGAP	Closing Rice Yield Gaps in Asia
CPWF	Challenge Program on Water and Food
CRIDA	Central Research Institute for Dryland Agriculture
CRPs	CGIAR Research Programs
CSB	Community Seed Bank
CSISA	Cereal Systems Initiative for South Asia
CURE	Consortium for Unfavorable Rice Environments
DA	Department of Agriculture

DAE	Directorate of Agriculture Extension
DFID	Department for International Development
DSR	Direct-Seeded Rice
ESA	East and Southern Africa
ESSP	Earth System Science Partnership
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field School
FGDs	Focus Group Discussions
FLAR	Latin American Fund for Irrigated Rice
FOs	Farmers' Organizations
FSHGs	Farmers' Self Help Groups
GAAP	Gender, Agriculture, and Assets Project
GDD	Ghana Dams Dialogue
GEF UNEP	Global Environment Facility-United Nations Environment Programme
GILB	Global Initiative on Late Blight
GMOs	Genetically Modified Organisms
GOs	Government Organizations
GR	Green Revolution
GRISP	Global Rice Science Partnership
HCP	Hub Communication Platform
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development
IARCs	International Agricultural Research Centres
ICAR	Indian Council for Agricultural Research

ICARDA	International Center for Agricultural Research in the Dry Areas
ICIMOD	International Centre for Integrated Mountain Development
ICLARM	International Centre for Living Aquatic Resources Management
ICRAF	International Centre for Research in Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT-KM	Information and Communications Technology (ICT) and Knowledge Management
IDOs	Intermediate Development Outcomes
IDRC	International Development Research Centre
IDS	Institute of Development Studies
IEC	Information, Education and Communication
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
IIMI	Indian Institute of Management Indore
IITA	International Institute of Tropical Agriculture
ILAC	Institutional Learning and Change
ILRI	International Livestock Research Institute
INCOPA	Project Innovation and Competitiveness of the Peruvian Potato
INIAP	Instituto Nacional Autonomo de Investigaciones Agropecuarias
INRAN	National Institute of Research on Foods and Nutrition
IPGRI	International Plant Genetic Resources Institute
IPM	Integrated Pest Management
IRRC	Irrigated Rice Research Consortium

IRRI	International Rice Research Institute
IS	Innovation Systems
ISF	Integrated Soil Fertility
ISNAR	International Service for National Agricultural Research
IUCN	International Union for the Conservation of Nature
IUFRO	International Union of Forest Research Organizations
IWLM	Integrated Water and Land Management Program
IWMI	International Water Management Institute
KOISP	KirindiOya Irrigation and Settlement Project
L&CS	Learning and Capacity Strengthening
LA	Learning Alliance
LI-BIRD	Local Initiatives for Biodiversity, Research and Development
M&E	Monitoring and Evaluation
MCA	Multi-Criteria Analysis
MFMR	Ministry of Fisheries and Marine Resources
MSP	Multistakeholder Partnership
MSSRF	M. S. Swaminathan Research Foundation
NAFRI	National Agriculture and Forestry Research Institute
NARC	Nepal Agricultural Research Council
NARES	National Agricultural Research and Extension Systems
NERICA	New Rice for Africa
NGO	Non-government Organization
NM	Nutrient Manager

PACS	Payment for Agrobiodiversity Conservation Services
PAR	Participatory Action Research
PAR	Platform for Agrobiodiversity Research
PENAPH	Participatory Epidemiology Network for Animal and Public Health
PES	Payment for Ecosystem Services
PIPA	Participatory Impact Pathway Method
PMCA	Participatory Market Chain Approach
PPB	Participatory Plant Breeding
PRA	Participatory Rural Appraisal
PR&D	Participatory Research and Development
PRSSP	Philippine Rice Self-Sufficiency Project
PSROI	Participatory Social Return on Investment
PTD	Participatory Technology Development
PVS	Participatory Varietal Selection
QAAFI-UQ	Queensland Alliance for Agricultural and Food Innovation-University of Queensland
R4D	Research for Development
RAAKS	Rapid Appraisal of Agricultural Knowledge Systems
R&D	Research and Development
R-M	Rice-Maize
RTB	Roots, Tubers, and Bananas
RUPES	Rewards for, Use of and Shared Investment in Pro-poor Environmental Services
SA	South Asia

SAFE	Support to Able-bodied Vulnerable Groups to Achieve Food Security Project
SARD	Sustainable Agriculture and Rural Development
SDC	Swiss Agency for Development and Cooperation
SDTT	Sir Dorabji Tata Trust
SEA	Southeast Asia
SEI	Stockholm Environment Institute
SIMLESA	Sustainable Intensification of Maize-Legume Systems for Food Security in Eastern and Southern Africa
SPs	Service Providers
SPHI	Sweetpotato for Profit and Health Initiative
SSNM	Site-Specific Nutrient Management
STARGO	Strengthening Aquatic Resource Governance
SWC	Soil and Water Conservation
SWOT	Strengths, Weaknesses, Opportunities, Threats
TSS	Tropical Shelterwood System
UNAL	National University of Colombia
UNEP	United Nations Environment Program
UPTR	Unpuddled Transplanted Rice
UPWARD	Users' Perspectives With Agricultural Research and Development
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USM	University of Southern Mindanao
WAIPRO	West African Irrigation Project
WARDA	West Africa Rice Development Association

WWF

World Wide Fund for Nature

Preamble

In the 1980s the Consultative Group for International Agricultural Research (CGIAR) system was expected to limit its work to ‘basic’ and ‘strategic’ research and rely on the National Agricultural Research Systems to do applied research and ensure effective delivery of research outputs. By 2000 internal reviews and pressures from donors and civil society resulted in a bigger emphasis on providing evidence of impact of research work. The donor pressures to show impact and to ensure better relevance of CGIAR work to the needs of poor, including and especially women, has often been a major impetus to the inclusion of participatory methods within CGIAR work. Participatory varietal selection for example has had clearly discernible benefits with ensuring impact. Centres such as the International Potato Center (CIP) and the International Center for Research in Tropical Agriculture (CIAT) became forerunners in efforts to test, develop and introduce participatory approaches (farmer participatory research, farmer field schools, CIALS or Local farmers agricultural research committees, multi stakeholder platforms, and so on). Early tool kits of PRGA included topics such as gender, technology development, learning alliances, and so on. ICRAF (now World Forestry Centre) was among the early CG centres to emphasize the importance of promoting approaches to scaling up research impacts. Systemwide programs such as the Collective Action and Property Rights (CAPRI) and the Participatory Research and Gender Analysis (PRGA) were probably the first coordinated and organized efforts to address issues, themes and methods in what we today generally broadly refer to as *social learning*. These activities however were sometimes limited to pockets within the centres and often limited to the work of network members or individual champions within respective CG centres.

Meanwhile following a comprehensive review of CGIAR in 2008¹, major changes in the form and structure and processes of how CGIAR operates started to happen in the latter part of this decade with a bigger shift towards achieving development objectives. The review of the CGIAR system, structure and activities and the ensuing reform process resulted in a reorganized structure and a new set of programs. The ‘new’ CGIAR today works towards four

¹ This publication should be cited as: CGIAR Independent Review Panel. 2008. Bringing Together the Best of Science and the Best of Development. Independent Review of the CGIAR System. Report to the Executive Council. Washington DC.

strategic system level outcomes: reducing rural poverty, improved food security, improved nutrition and health and sustainably managed natural resources.

CGIAR Research is organized and implemented today through multicentre initiatives known as CGIAR Research Programs or CRPs. The CRPs are expected to be aligned with the Strategic Result Framework. To be eligible for support CRPs agree to certain core principles and have to demonstrate how they will achieve impact on one or more of the four system level outcomes (indicated earlier). It is in this new CGIAR environment that a case can be made for using participatory initiatives on a wider scale in order to make research more developmentally relevant over time.

Introduction

This discussion paper is based primarily on the results of a stocktaking exercise of social learning-related efforts in the CGIAR, commissioned by the CGIAR Research Program Climate Change, Agriculture and Food Security (CCAFS) under its theme ‘Integration for Decision Making’ (theme 4).

A primary objective of the CCAFS ‘Integration for Decision Making’ theme is the need to explore approaches and methods that enhance knowledge-to-action linkages with a wide range of partners. An essential activity of that CCAFS initiative is to develop decision support and communication tools so that policymakers, development partners, researchers and farmers can make decisions with a greater understanding of the interactions between local conditions, national policies and programs, and international development, in the face of multiple drivers of change. In CCAFS Theme 4 efforts three social learning-related approaches are being considered, that together are expected to transform and empower community decision-making on climate change: 1) Participatory Action Research, 2) Participatory Communication, and 3) Collective Social Learning.

In the conduct of this exercise a broad definition of social learning is used where research involves two or more stakeholder and several cycles of learning and reflection. For purposes of this stocktaking exercise, the definition of social learning proposed by Koelen and Das (2002) was used: Social learning is defined as the process through which groups of people learn, by jointly defining problems, searching for and implementing solutions, and assessing the value of solutions for specific problems.

Given that CCAFS had previously commissioned a study on participatory communications (with IDS and IIED) and that gender is already increasingly being mainstreamed within the reformed CGIAR, this stocktaking exercise devoted special attention to participatory research and closely related approaches and upscaling efforts (such as multistakeholder platforms for example). This report and the stocktaking exercise were limited to activities undertaken by institutions in the CGIAR system.

This work was undertaken as part of a short-term consultancy (35 days) and consequently has some significant limitations. It was not backed up with an extensive literature review except

for purposes of finding a suitable and relevant definition of social learning that is relevant to agricultural scientists but instead relied on personal exchanges, structured surveys with scientists within the system and an analysis of CGIAR Centre websites. The CCAFS Sandbox was initially used to inform the CCAFS social learning community about the stocktaking and seeks inputs. Consistent with principles of social learning effort, interactive exchanges with scientists and an iterative approach were used in arriving at the list of propositions presented in this working paper.

Overview of the Methodology

Preliminary activities included the conduct of exploratory discussions with key informants followed by a desk review of websites of each of the CGIAR centres. These two steps served as the basis for arriving at a list of proponents of social learning within CGIAR (for invitation to a meeting in Addis Ababa held November 2012).

Two short surveys followed the web review of CG activities. A personalized approach was used in contacting respondents. Surveys were kept short, functional and targeted (survey instruments can be seen in Appendix 1). The stocktaking exercise thus relied primarily on direct sources of information from scientists within the CGIAR system. Out of the 106 people who were sent survey forms as many as 47 responded (see Appendix 2). In addition, 33 people were consulted via email. Respondents came from 12 CGIAR Centres.

The surveys began with a reminder that past efforts to introduce participatory approaches varied greatly. It is well known that those scientists that have chosen to adopt participatory research methods might have done so for different reasons: assessments, appraisals, varietal selection, plant breeding, collaborative management, and so on. It's not surprising, therefore, that there is considerable diversity when it comes to the application of participatory methods in CGIAR work. Respondents were asked if there were increased opportunities for social learning resulting from a resurfacing of an agriculture research for development agenda and/or from a newly reformed CCGIAR structural set up. Refer to Appendix 3 for a compilation of responses.

Building on an analysis of CGIAR Centre websites (see next paragraph) and based on the information generated from the surveys and personal exchanges, a set of 16 short cases (so-called Promising Cases) demonstrating the diversity of social learning efforts was assembled. These cases were developed primarily from secondary data/information resources collected in the course of the stocktaking exercise. These are provided in Appendix 4.

A partial listing of 128 social learning and related efforts in CGIAR (Appendix 5) was also prepared, mainly to provide a snapshot of the range/diversity of ongoing efforts. Finally, key propositions were developed from the stocktaking exercise. These serve as the basis for structuring and synthesizing the findings from the stocktaking exercise.

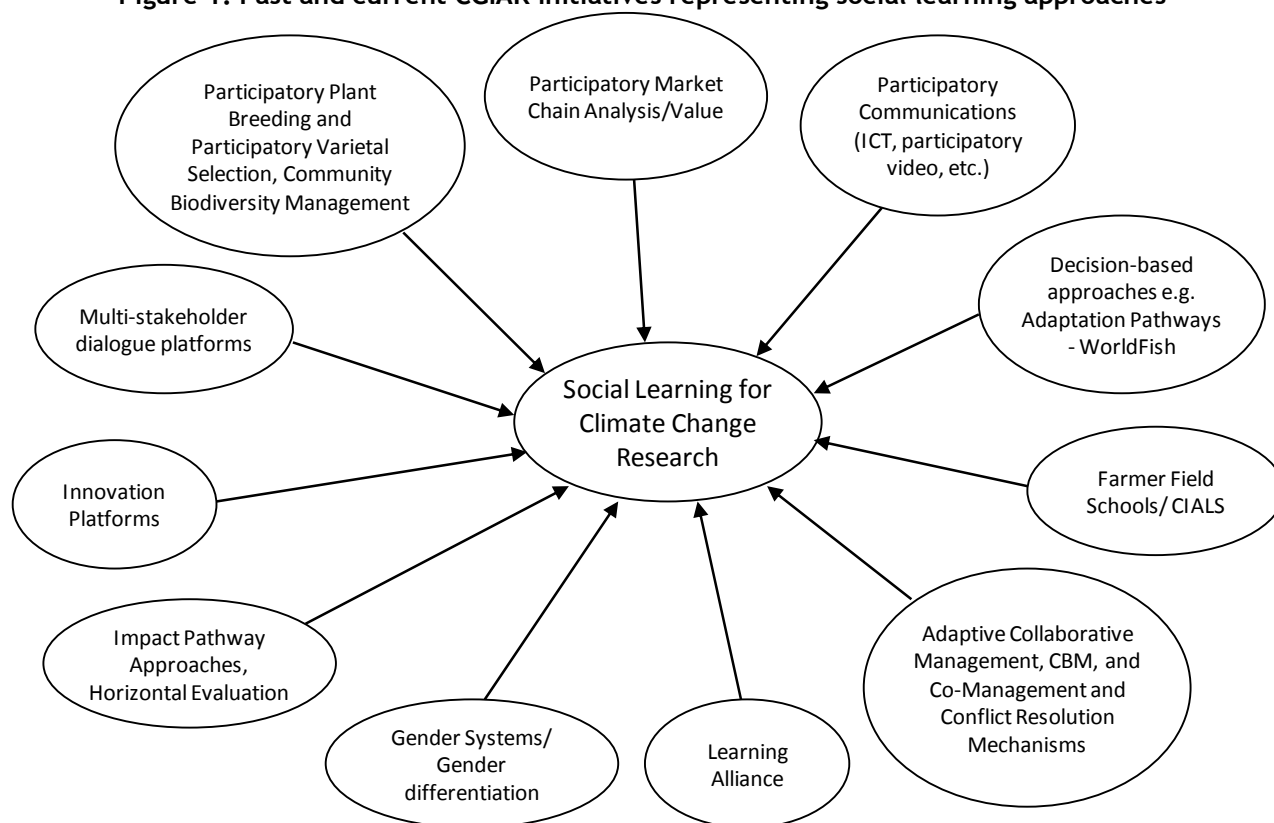
This stocktaking exercise, however, has its limitations, given that it was undertaken over a short five weeks and can at best provide a snapshot of prospects and factors influencing the potential for uptake of social learning by CGIAR.

Findings

This stocktaking exercise of social learning in CGIAR, relying on a wide range of approaches and sources of information, took the position that a narrow definition of social learning would not be helpful. Diversity (ecosystems, themes, commodities, and so on) characterizes CGIAR research and as a result the portfolio of social learning initiatives is also fairly varied. This stocktaking exercise indicated that, though social learning is sometimes isolated and often not coordinated and/or mainstreamed into institute-wide programs, there is indeed a rich array of approaches. As a consequence it might be suggested that there is no need to rediscover the wheel but to build further on these initiatives.

Drawing on CGIAR centre-wide surveys and website analysis, and after further reviewing the working definitions of social learning (presented earlier in the Introduction and under proposition 8), the following past/current initiatives of the CGIAR stood out as some of the more striking examples of the range and diversity of (well-tested) social learning initiatives in the CGIAR.

Figure 1: Past and current CGIAR initiatives representing social learning approaches



Source: Author

Many of these initiatives however might have remained isolated and were not mainstreamed within CGIAR. In some cases, this work was more widely recognized outside of the CGIAR Scientific community. This no longer has to be the case because development outcomes are emphasized and valued more than in the past, partly the result of the new mandate of the Consortium and partly resulting from the demand for wider impacts from civil society and donors.

Social learning in CGIAR will out of necessity have to be multiscalar in nature: from individual to community to national. It would be difficult to understand how the anticipated development outcomes will be realized without multistakeholder platforms (for example, learning alliances, innovation development platform) that are crucial for achieving the needed outscaled impacts.

The stocktaking revealed that the key determinant of how successful the wider application of social learning will be achieved in the future (compared for example with the experience of the Participatory Research and Gender Analysis or PRGA) will be the nature of institutional – especially higher management – support and recognition that the Centres will be able to provide the users/promoters of social learning.

Overall there was cautious optimism for change in how research is done, most of it resulting from the substantially enhanced opportunities for intercentre partnerships resulting from the Collaborative Research Program (CRP) structures. It is still not yet clear from this exercise if the National Research Institutions are being constructively engaged to the extent needed for real and lasting change (deeper levels of partnerships not token/representational).

Similarly on the issue of the relevance of social learning to the work of CCAFS (that is, climate change), views converged similarly. For emphasis' sake it's best that unedited views of the scientific community be shared (see Box 1).

Box 1: Relevance of Participatory Work to CCAFS Climate Change Research

If we understand participatory research as involving different stakeholders, including NGOs, CBOs and Farmer Organisations, clearly these ‘non-scientific’ (depends on the definition of science) actors not only have the knowledge basis from their practical experience, but also adapt the new insights in their farm and field realities. (1.15)

Most of the valuable lessons from participatory initiatives are at a small-scale, very local level, while the discourse of climate change is still a large(r)-scale, aggregate level. The concepts of CC and their implications community levels. (2.3)

Farmer-to-farmer linkages in communication and delivery of information in the rural areas is a critical factor in bringing results of research to target beneficiaries – these communication linkages can be tapped to speed up the delivery of outputs to users. (1.10)

The challenge is to improve capacity of local level institution in CC adaptation and show them how a portfolio of diverse integrated farming system (crop-tree-animals), species and varieties/traits can be used to address local adversity. (1.9)

Stakeholder participation processes will (help) introduce perspectives and insights that researchers would not possess if they didn’t talk to other stakeholders from outside their local networks. The challenge is, how do we build networks that operate efficiently and include the right people and, most importantly, how do we synthesise the knowledge that we acquire from stakeholder networks and feed this into the action process. This last issue is probably even more of a problem for an area like in the case of climate change where at least some of that action must come at scale. (1.4)

There is interesting work or ideas in the field but without collective thinking and understanding others’ work it is difficult to create a platform of social learning (needs skills and time to listen other views) that can be translated so the our impact groups are benefited. (1.9)

Much of the “climate smart agriculture” that is being discussed now is similar to (or the same as) much of the older natural resource management. There are similar issues that arise in the institutional area – what is needed are coordination mechanisms to build cooperation and trust among neighbours. (2.4)

Climate change is one among many problems faced by poor smallholder farming communities.

Participatory research involves analysing existing problems and looking for solutions together with a range of stakeholders. (1.7).

Climate smart agricultural technologies and practices are just the latest in a long list of technologies that researchers and development practitioners have developed over the last decades and subsequently promoted in rural areas. The truth is that the benefits from these technological innovations have often not reached the majority of resource-poor farmers cultivating marginal lands because farmers have not readily adopted them. We can then ensure that we do not commit the same mistakes. Researchers and development practitioners need to facilitate the active participation of farmers; in this way, they can develop technologies that address farmers’ priority needs. (2.7)

In the rest of the report, a set of propositions drawn from the study are presented for the consideration of the research and development community. Research institutions have the capacities and can deliver better on its promises through effective use of social learning, nurturing of partnerships with national stake holders and drawing lessons from these efforts. If social learning was already considered relevant in the past, it is probably more relevant today because of the special challenges posed by the complexities of climate change and the prevailing situation of poverty and food security.

Discussion of Key Propositions Emerging from the Survey

Key Propositions resulting from clustering and analysis of survey responses are presented below. The categories were derived from an analysis of 161 sets of responses from 47 respondent. Further explanation/illustration is provided by directly listing a selection of the responses under the derived category (proposition). The numbers at the end of some statements refer to a code for respondents offering confidentiality. Where names do appear, special permission was obtained to use quotations.

PROPOSITION 1: More potential for social learning in a reformed CGIAR

With structural and functional changes resulting from its current emphasis on poverty, food security, environmental and gender equity goals, the reformed CGIAR offers improved prospects for the wider uptake of social learning and related approaches.

The surveys suggest that there is new optimism to the prospects of uptake of social learning under the reformed set up of the CGIAR. The reasons for this optimism, drawn from the stocktaking survey, include:

Fairly widespread understanding and acceptance of the serious challenges posed by poverty, climate change and degradation of agricultural landscapes, poor uptake of research in some sectors/ geographic areas and the realities of an unfinished business (“the billions unreached”).

The research challenge is no longer limited to managing biophysical and economic components of agriculture and natural resource management systems alone. Now research involves the social arena as well. Achieving a shared understanding of problems and solutions is therefore imperative (2.6).

Increasingly the focus is on more complex challenges faced by multiple stakeholders with often divergent perspectives and competing goals (2.6).

The reformed CGIAR, especially the CRP structures, is helping foster increased intercentre collaboration and cooperation among scientists. CRPs with their increased funding are creating this environment for change.

There is currently more emphasis on a “systems” approach that incorporates interdisciplinary approaches – that is seen in other institutions and organisations (universities and NGOs) that the CG system works with (2.1).

There is augmented relevance for social learning approaches and more of an understanding of the need for participation of a wide range of stakeholders in all stages of projects and initiatives (2.3).

Broader recognition of the relevance and necessity of these type of processes (social learning) for responding to complex, uncertain and cross-scalar challenges such as climate change (2.16).

Complex issues requiring knowledge-intensive solutions are not embedded in easy-to-disseminate-and-adopt technologies like seeds.

The CRPs' (and donor) emphasis on impact have created pressures for such approaches and for these to go beyond tokenism.

“We probably have an opportunity now to pull together diverse bits of research done by different centres/partners focusing on the kinds of changes in agricultural practices that are going to be needed to deal with a changing climate...we should also be building on comparative advantages and strengths of different centres”.

Survey response: Patti Kristjanson, CCAFS/ICRAF

“If we consider the design and content of the CGIAR Research Programs as the institutional setting (rules, norms, structures, procedures) within which International Agriculture Research will take place, it can be said that the CRPs offer (at least potentially) a good environment for broadening the use of participatory approaches. In this sense many of the CRPs recognize the need of fostering collective action, knowledge sharing and social learning among farmers, market agents, public and private R &D organizations and policymakers at local and national levels, in order to achieve their expected research and development outcomes and impacts. In this regard the CRPs stand out as good examples in terms of offering opportunities to expand the use of participatory approaches....”

Survey response: Andre Devaux, CIP

PROPOSITION 2: Institutional environments, structures and work environment are critical enabling factors

In spite of the structural and program transformation efforts, what has probably not changed enough are the individual CGIAR institutional environments, structures and work arrangements which still pose as hurdles (2.3, 2.4). While there was optimism among the respondents in general about the prospects for approaches (social learning in its broadest sense that includes participatory research and communications, constructive engagement, multi-stakeholder and innovation platforms, and so on), this optimism was often cautious and conditional to certain institutional changes taking place within individual centres.

There is still a need to foster an enabling environment for transdisciplinary approaches and recognition of multiple sources of knowledge. Frameworks are still defined by disciplinary boundaries and biases (2.6)

A great variety of methodologies and approaches come from different centres and so there is now difficulty coordinating among the different implementation methods (2.3).

CGIAR scientists are now swamped with design and coordination of CRPs and (sometimes) work independently of each other (2.3).

The way the reform process has been conducted to date has meant there has been less meaningful involvement of many partners than in the past. Struggling to meet tight deadlines imposed by the consortium does not leave time for meaningful consultations (2.15).

The way results-based management is implemented will ultimately determine how successful CGIAR is at changing its work methods (for example, setting inflexible targets in a top-down manner with minimal consultations could be detrimental) (2.15).

Performance contracts between CRPs/leading centres and consortium need to be taken seriously if planned/expected results are to be achieved (2.5).

“Mainstreaming will require the following: greater support from centre leadership, greater attention to the quality of process, being explicit about the behavioural changes that participatory approaches are expected to influence and monitor them and be better at providing evidence of what works and what does not”.

- Boru Douthwaite World Fish and Innovation and Impact Director Challenge Program on Water and Food

PROPOSITION 3: Recognition, rewards and incentives serve as motivation and driving forces

Recognition, reward systems and incentives are required if new modes (such as social learning) are to be effectively institutionalized within individual CGIAR centres.

Support has to come from the top: Director Generals (DGs) need to understand not only donor request for such approaches, but embrace it themselves as the way to sustainable changes in development. If the CGs are genuinely committed to impact rather than outputs, staff must receive not only encouragement from the administrative structure to embrace and utilize a systems approach but rewards as well (2.1).

While CRPs with their cross-centre structures provide some real opportunities for responding to diverse realities, needs and opportunities, but the reality is that incentives are still oriented towards competition not cooperation (2.11).

Currently the emphasis is still on 'peer-reviewed' publications. Other knowledge products must be compensated/rewarded. The statement in favour of open access as a working principle in CGIAR is another good and crucial step. Social learning efforts need to be recognized and rewarded (2.4, 2.5).

New institutional environments are needed. Institutional culture has to evolve to value collaboration, patience with each other, and an understanding of the philosophical differences all of which all have practical implications. Senior management at the centres has a key role to play in fostering this new institutional environment (2.7, 2.9).

Institutional settings that support social learning, recognize the legitimacy of social science, foster collaboration and value philosophical differences are needed. While CGIAR is good at bringing young people, more social scientists with experience to produce top quality science (that is, rigorous research with sound methods) are needed (2.11).

While it is getting better, political support, will and funding are slow in coming and one will have to rely on the few strong champions that the system already has. But there is a nevertheless a need for formalization and coordination of these efforts (2.3).

The shift from a traditional, technology-generation focus to an organization that maintains this scientific excellence while simultaneously encompassing a greater emphasis on outcomes and impacts will take time (2.7).

“Scientists and administrators need to recognize diversity and local situations and not push for a ‘one size fits all’ approach. Scientists need to be rewarded for such work that requires a great deal of small talks with stakeholders not just expected to publish papers. Scientists also develop the general framework and approach and encourage local adaptation for local settings.”

- K.L. Heong, IRRI

PROPOSITION 4: Towards a more genuine development—orientation

Implicit in the requirement to deliver outcomes in development terms is the need for researchers to connect with a wider range of development actors and to do this more strategically than in the past.

A stronger development orientation for research is expected with the consortium’s emphasis on ensuring impact for each of the four system level outcomes (SLOs) and the call to develop Intermediate Development outcomes (IDOs) also at system level. As a result of theories of change, impact pathways are receiving unprecedented attention in order to deliver on the promises.

Intermediate development outcomes related to social learning and participation need to be included (2.15).

The focus on poverty and impact is 'conducive' to the introduction of participatory approaches. The drive for research outcomes will provide powerful incentives for engaging in participatory methods. Outcomes have to be facilitated through some kind of participatory approaches involving all relevant stakeholders (2.7).

A diversity of stakeholders with their different perspectives and sometimes competing interests need to be engaged in order to deliver results and enhance uptake in any AR4 D approaches. Social learning methods such those embedded in innovation platforms, learning alliances and partnership building efforts will out of necessity be 'in demand'.

Innovation development should involve not just technology development but also methodological innovations as well such as participatory research planning and management (1.10).

“Top priority that all of us can work on is to put in place a system of managing and monitoring CRP performance against agreed and prioritized development outcomes, reported in a timely and harmonized fashion. This is in essence what the SRF Action Plan lays out and this is more widely endorsed as the top priority agenda for implementation in 2013.”

(Frank Rijsberman reflections at GCARD , Nov 5 2012)

PROPOSITION 5: National partners are virtually equal Research and Development partners

National partners should be engaged as virtually equal R and D partners in projects at as many levels as possible (2.13). A genuine and empowering engagement of these national research sectors are crucially important if the impact of research is to be adequately scaled out.

CRPs which are still concentrating on research on global public goods and mechanisms to link with national partners in order to reach beneficiaries are not yet well developed (2.13).

New research modalities must recognize the value of bringing stakeholders across the R and D spectrum. Special attention needs to be devoted to strategic and purposive integration of the national research and rural advisory services.

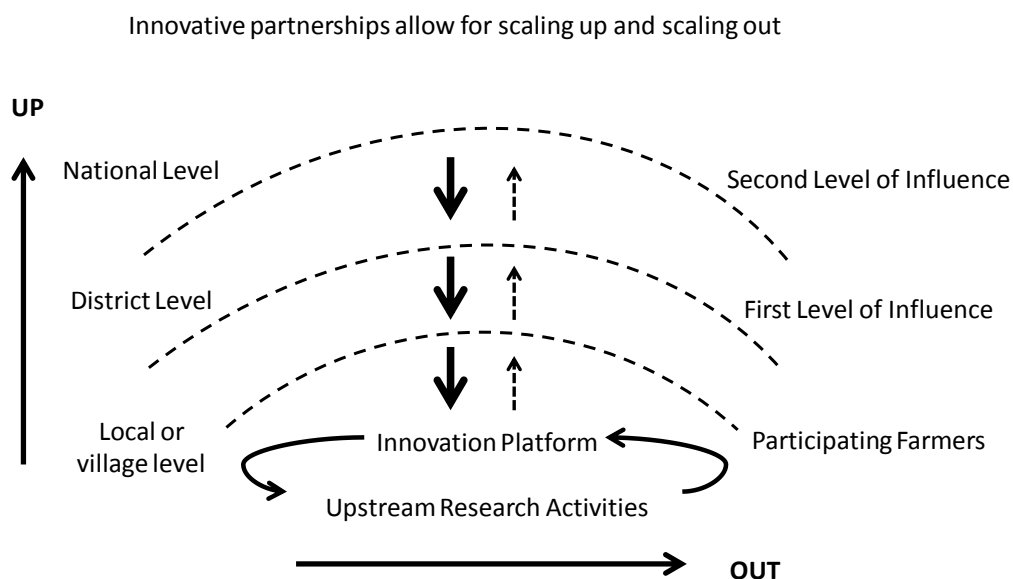
CGIAR should continue to work closely with the National Agricultural Research and Extension Systems (NARES) because they know better what is happening in their environments (2.12). National partners should be engaged as virtually equal R and D partners in projects at all levels (2.13).

Partnerships through associated platforms can help bring about this integration of national partners research and rural advisory. Innovative partnerships allow for scaling up and scaling out.

Partnerships and associated platforms offer possible ways to bring diverse R and D stakeholders together (see Figure 2 and refer to the appendices for discussions on learning alliances, innovation platforms and related approaches).

More recently many national, sub-regional and regional organisations have shown an increased commitment to stakeholder platforms and inclusive research (2.10). Regional innovation platforms should be promoted and eventually facilitated by CG centres to play useful roles in fostering R and D methods and strengthening national innovation capacities for promoting pro-poor innovation processes (2.13).

Figure 2: Partnerships and associated platforms offer possible solution



Source: <http://www.slideshare.net/gcard/p31-adekunle-ssa-cp-pls-and-innovation-platforms>

“Institutions that are expected to make use of the knowledge generated from research should be involved at the start even at the planning stage, so that they can have a sense of ownership, are properly consulted and trained on how to finally use decision support tools.”

– *Digna O. Manzanilla, IRRI*

“We need partners from countries in the south who have a more detailed understanding of the context. If capacity is a constraint we should build that... it strengthens our own capacity to understand a place.”

- *Ruth Meinzen-Dick, IFPRI*

PROPOSITION 6: Model building for community engagement and local-level action

Model building for effective community engagement in climate change adaptation involves local action and is best done with the communities themselves.

Communities and individuals are already adapting and innovating to cope with climate variability and environmental change. There are lessons to take up from this experience (1.16). Adaptive capacity is about a community’s ability to be more innovative, quicker to adopt and adapt science, technologies and market opportunities and share these innovative and learning capacities with other farmers and communities. These are all linked. All of this is deeply embedded in social learning theory and practice (1.13).

Addressing climate change, whether mitigation or adaptation, requires changes in people's behaviours. Suggesting or mandating change from ‘on high’ has long proven fraught with difficulties and fatal errors. The human variability along with environmental variability globally means that answers cannot be applied across the board. Tailoring both mitigation and adaptation efforts to local contexts necessitate the help of local people – a shared learning approach that analyses, plans, mitigates, adapts, monitors what happens and improves on initial results in an iterative manner (2.9).

Inevitably climate change work has to address institutional issues associated with climate change and must draw heavily from a rich and long tradition of research on collective action (<http://www.capri.cgiar.org>).

Model building for effective community engagement of relevance to any adaptation work and subsequent upscaling is best developed in communities, through effective researcher engagement at the local level. The value of FFS, Farmer Research Committees (CIALs) and Adaptive Collaborative Management (ACM) as relevant approaches (for researchers) to engage local communities has already been proven within CGIAR.

There are important considerations in strengthening the needed local-level action that is critical to successful climate change adaptation: capacities of local institutions need to be built.

Climate change scenarios must get close to the reality and deal with location specificities (agro-ecology, climate, culture, and so on). Working at the local level is a key step to bringing locally derived solutions to scale.

“Addressing climate change, whether mitigation or adaptation, is going to require changes in people's behaviour. We really need to be tailoring both mitigation and adaptation efforts to local contexts – with the help of local people – a shared learning approach that analyses, plans, mitigates/adapts, monitors what happens , and improves on initial results.”

Survey response: Carol J Pierce Colfer, CIFOR/Cornell University

“Climate change shares several key features of the ‘problematic situation’ associated with other sustainability oriented R and D challenges – multiple stakeholders, nested systems and adaptive learning to external environments that are under continuing transition.”

Survey response: Dindo Campilan, CIP

PROPOSITION 7: Development outcomes are desirable at three levels: individual, community and at multi-scale levels

The past should inform the future especially as the social and institutional issues associated with Agriculture Research for Development (AR4D) in a changing climate context are not all new.

If development outcomes are to be achieved, efforts might have to be directed to at least three levels if development outcomes are to be achieved. Each of these levels would require the engagement of multiple different stakeholders in processes constituted as social learning.

INDIVIDUAL FARMER LEVEL: Farmer engagement in diagnosis (PRA typed) or in evaluating technologies, to more complex participatory breeding programs.

COMMUNITY LEVEL: Community-based biodiversity management, adaptive comanagement, comanagement, and so on.

MULTISCALE LEVEL: Innovation platforms, learning alliances, multistakeholder platforms, and so on.

Going to scale is always the challenge. Action research on platforms and networks (where learning about methods is a research objective) are needed. We also need more research on the partnerships process itself: how methods actually play out with feedback loops to learning (2.10).

Models for out-scaling at the higher levels have also been demonstrated through such approaches as learning alliances, innovation platforms and other related multistakeholder platforms.

A big challenge in climate change research will be the difficulty in applying social learning methods across a wide range of situations. Many methods are applied to a specific set of problems and research deliverables. It is often difficult to draw general conclusions and to inform scale issues and interventions. Many proponents of participatory approaches have had difficulty going beyond the diagnostic stages (1.4).

Comprehensive evidence on the successes of participatory research can convince a sceptical or critical audience. Robust, comprehensive and reliable M and E and impact monitoring systems can help measure the impacts of social learning methods.

“There is no blueprint for doing multi stakeholder platforms; one of the strengths of these processes is the way they allow for things to change along the MSP process; we need to design processes to allow people to join along the way. Two way dialogues between what research uncovers and what policy makers or local communities demand are important parts of what we want to achieve.”

-Kim Geheb at the Challenge Program for Water and Food Forum, December 2011

“Care should be taken to avoid oversimplification, reliance on perception and speculation. A lot of past participatory work, at least with farmers, drew on the very good understanding that farmers had of their contexts. If the future will differ from the past, then the way farmers participate and the types of information and knowledge that they contribute to the process will be different. Social learning will be an essential part of that.”

Nancy Johnson, ILRI Nov 2012

PROPOSITION 8: A diverse portfolio requires openness

Researchers become engaged in social learning for different reasons using a diversity of approaches and definitions.

The stocktaking exercise sought to identify a short list of definitions that took into consideration the CGIAR context. Social learning for the purposes of this exercise was understood to be a process where two or more stakeholders worked together, relying on cycles of learning, reflection and collective action in order to arrive at lasting and scalable solutions to identified priorities. With such a definition a broader range of approaches could be studied.

In the course of this stocktaking exercise a review of related literature provided useful and relevant ways of understanding or defining social learning:

A CCAFS-sponsored study by the Institute of Development Studies and the Institute of Environment and Development states that “Social Learning approaches help facilitate knowledge sharing and joint learning experiences between stakeholders... through working together to better understand their situation, new shared ways of knowing are generated” (Harvey et al. 2012).

Keen et al. (2005) define “Social Learning as the collective action and reflection that takes place amongst both individuals and groups when they work to improve the management of the inter relationships between social and ecological systems...”

Waddel (2002) preferred not to use Social Learning, choosing instead the term ‘societal learning’ when he described large-system change processes. “When formalised into new patterns of working together – often through the creation of new umbrella organisations with participants from diverse parts of society – these mutually beneficial outcomes represent societal learning.” He also emphasized that societal learning is a process of changing patterns of interactions within and between adverse organizations and social units to enhance society’s capacity to innovate. Large-scale problems – such as poverty and environmental degradation – require substantial societal learning in order for lasting change to occur.”

Two additional definitions stood out in terms of their relevance to the work currently underway in CGIAR. It is likely that a broader definition of social learning, rather than a reductionist one, would encourage scientists to understand social learning and explore its potential. These definitions with strong problem-solving elements are presented below:

Social learning is defined as the process through which groups of people learn, by jointly defining problems, searching for and implementing solutions, and assessing the value of solutions for specific problems (Koelen and Das 2002).

Social learning brings about a shift from 'multiple cognition' to 'collective cognition'. Individuals involved in social learning processes begin with quite different perceptions of their current situation and the potential for change; as they interact, they develop common, shared perspectives, insights and values. (Personal exchanges Andre Devaux, Nov 9th 2012)

“In my experience, the key challenges that agricultural scientist have is their deep desire to ensure that others know what they know.... but because they are agricultural scientists and not social scientists (particularly in learning pedagogy) they often make the mistake that all is needed is to tell others what they know. This is not about social learning and enhancing adaptive capacity. The way we want to address this is to begin with defining community research agendas and then engaging researchers with communities to help the communities themselves to generate research and analyse results. It moves this from doing research 'for' communities to doing research 'with' communities. Not all scientists will want to engage at this level as it might not be scientifically stimulating. That is okay as there is a need for traditional more formal science as well.”

Survey response: Kevin Kamp, World Fish

Conclusions

The structural changes and program delivery mechanisms within the CGIAR system have been transformed substantially, offering increased potential for partnerships, intercentre collaboration, and transdisciplinary research. With explicit inclusion of development objectives at the system and program level, more space is created for social learning within CGIAR. Institutional frameworks, leadership attitudes and management support at the centre level, however, will influence or determine the success of community of social learning researchers. The effective engagement of national research and rural advisory services as equal players, within evolving and growing intercentre partnerships, deserves far more serious attention to deliver on social learning goals within an agricultural research for development framework.

Social learning approaches are critically relevant to achieving the development goals and even crucial in climate change adaptation research , mainly because of the need for researchers to connect with the local /community context . This has to be done in ways that conventional research was not previously required to do. The scope and nature of social learning approaches for use within CGIAR will out of necessity differ from one program to another, depending on different local contexts. This richness of social learning efforts should be nurtured even as measures for assessing their results are made more rigorous in efforts to build a better evidence base for such approaches.

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Appendix 1: Survey Instruments (Survey form 1 and 2)

October 31, 2012

Dear _____,

I am currently doing a short assignment with CCAFS (<http://ccafs.cgiar.org/>) which involves a stocktaking exercise to identify approaches used within the CGIAR which are known to have enhanced local decision making and joint learning (with emphasis on social learning, participatory research and participatory communication). We are interested in identifying cases where researchers have effectively engaged other stakeholders in the research process, where joint learning is involved and impacts have accrued.

1. Please list down examples of current or recently concluded work in CGIAR (up to 3) that you are connected to or most familiar with.

Name of Project	Key Features (as understood by you)	Main Implementing Centers	Contact Person (Name/ Email)	Other Relevant Information
(i)				
(ii)				
(iii)				

2. Climate change research could draw lessons from past work (in participatory research and participatory communications and social learning). Yes/No?

If you agree please elaborate why?

3. What are some of the key challenges that scientists encounter in institutionalizing such approaches? Any suggestions on how these can be addressed?

4. Other comments

Feel free to provide information outside of the provided table if necessary.

Thank you for your time. I would like to reciprocate by sharing with you a link to a publication that you might find of relevance: http://web.idrc.ca/en/ev-84706-201-1-DO_TOPIC.html.

You can fill in this form and return it back at the earliest (ideally by November 4th or very soon thereafter).

Julian F. Gonsalves PhD
Consultant
CCAFS Theme 4

Name of Respondent : _____
Organisation : _____
Position : _____
Email address : _____

Main Survey Instrument

November 8, 2012

Dear _____,

I am currently doing a short assignment with CCAFs (<http://ccafs.cgiar.org/>) which involves a stocktaking exercise to identify approaches used within CGIAR which are known to enhance joint learning and local decision (with emphasis on social learning, participatory research and participatory communication). I am interested in identifying cases where researchers have effectively engaged other stakeholders in the research process, where joint learning is involved and impacts have accrued. We also have a special interest in the efforts where multiple stakeholders, multiple levels and interactive communication are featured. This special subset of people I am interviewing this week is mostly champions of participatory approaches and had a long history of engagement in CGIAR. I have some additional questions for you (apologies to those who responded to related questions earlier in the week).

Here is my list of questions. Please feel free to use additional space if needed.

1. Past efforts to introduce and institutionalize participatory approaches (e.g. farmer participatory approaches, constructive engagement, social learning, innovation platforms, etc.) in the CGIAR centres have varied over the years. With the current focus on poverty, food security and environment goals, is there a new relevance and better prospects for wider uptake of such approaches in the future? Do we now have more conducive institutional environments, structures and work arrangements that support this kind of change?
2. What would have to be done differently for the CGIAR centres to be more successful (this time around) in mainstreaming/institutionalizing such approaches within projects/centres?
3. Do you think that future research to address the causes/impacts of climate change could draw lessons from past (participatory) work? Why and how?
4. Please list examples of exemplary or notable work in CGIAR that deserve special attention in this stocktaking exercise.

Name of Project	Key Features (as understood by you)	Main Implementing Centers	Contact Person (Name/ Email)	Other Relevant Information
(i)				
(ii)				
(iii)				

5. Other comments

You can fill in this form and return it back at the earliest. Please give this survey your careful attention please!

Julian F. Gonsalves PhD

Consultant

CCAFS Theme 4

Name of Respondent : _____

Organisation : _____

Position : _____

Email address : _____

Appendix 2: List of survey respondents

Name	Organization
1. Aden A Aw-Hassan	International Center for Agricultural Research in the Dry Areas (ICARDA)
2. André Devaux	International Potato Center - CIP - Centro Internacional de la Papa
3. Peter Kromann	
4. Claudio Velasco	
5. Jorge Andrade-Piedra	
6. Ann Waters- Bayer	ETC EcoCulture
7. Bhuwon R Sthapit	Bioversity International
8. Blake Ratner	International Food Policy Research Institute (IFPRI)
9. Blane Harvey	Institute of Development Studies (IDS)
10. Boru Douthwaite	Challenge Program on Water and Food (CPWF) WorldFish
11. Carol J. Pierce Colfer	Center for International Forestry Research (CIFOR)
12. Chesha Wettasinha	ETC Foundation
13. Digna Manzanilla	International Rice Research Institute (IRRI)
14. Dindo Campilan	International Potato Center (CIP)
15. Doug Horton	Institutional Learning and Change (ILAC)
16. Florencia Palis	International Rice Research Institute (IRRI)
17. Graham Thiele	CGIAR Research Program (CRP) on Roots, Tubers and Bananas (RTB)
18. Jacqueline Ashby	International Center for Tropical Agricultural (CIAT)
19. Jamie Watts	World Food Program
20. Joel Janiya	International Rice Research Institute (IRRI)
21. Jonathan Hellin	International Maize and Wheat Improvement Center (CIMMYT)
22. Kathleen Earl Colverson	International Livestock Research Institute (ILRI)
23. Kevin Kamp	WorldFish
24. Kong Luen Heong	International Rice Research Institute (IRRI)
25. Laurens van Veldhuizen	ETC EcoCulture
26. Liz Carlile	International Institute for Environment and Development (IIED)
27. Marco Wopereis	WARDA
28. Mark Lundy	International Center for Tropical Agricultural (CIAT)
29. Michael Victor	CGIAR Challenge Program on water and Food (CPWF)
30. Moushumi Chaudhury	World Agroforestry Center (ICRAF)
31. Nancy Johnson	International Livestock Research Institute (ILRI)
32. Osana Bonilla-Findji	International Center for Tropical Agricultural (CIAT)
33. Patrick Dugan	WorldFish Center
34. Patti Kristjanson	World Agroforestry Center (ICRAF)
35. Paul Thompson	Middlesex University
36. Peter Ballantyne	International Livestock Research Institute (ILRI)

Name	Organization
37. Peter Gubbels	Groundswell International
38. Peter Thorne	International Livestock Research Institute (ILRI)
39. Polly Ericksen	International Livestock Research Institute (ILRI)
40. Rita Afiayi R. Agboh-Noameshie	Africa Rice Center (AfricaRice)
41. Ruth Meinzen-Dick	International Food Policy Research Institute (IFPRI)
42. Simone Staiger-Rivas	ICT-KM Program of the CGIAR
43. Sonja Vermeulen	International Center for Tropical Agricultural (CIAT)
44. Sophie Alvarez	International Center for Tropical Agricultural (CIAT)
45. Thelma Paris	International Rice Research Institute (IRRI)
46. Tonya Schuetz	CGIAR Challenge Program on Water and Food (CPWF)
47. Wim Hiemstra	ETC AgriCulture

Appendix 3: Consolidated survey responses

Survey Question 1:

Past efforts to introduce and institutionalize participatory approaches (e.g. farmer participatory approaches, constructive engagement, social learning, innovation platforms, etc.) in the CGIAR centres have varied over the years. With the current focus on poverty, food security and environment goals, is there a new relevance and better prospects for wider uptake of such approaches in the future? Do we now have more conducive institutional environments, structures and work arrangements that support this kind of change?

Consolidated Responses²:

2.1 I would like to believe there is more emphasis on a “systems” approach that incorporates interdisciplinary approaches – this is being seen in other institutions and organizations (universities and NGOs) that the CG system works with, so I think the external influence and donor interest is driving this shift. Certainly the interest and emphasis on gender as a cross-cutting issue is seeing unprecedented attention.

2.2 A wider uptake of participatory approaches has yet to be seen. Some scientists are more informed than others on how to incorporate participatory approaches. Programs such as CCAFS are making participatory approaches more institutional so CG centres might change over time.

2.3 There is indeed new (augmented) relevance to this kind of such approaches, and a more conducive institutional environment in the sense that now there is more knowledge of the need for participation of a wide range of stakeholders in all stages of projects and initiatives, starting from needs- based design, implementation, evaluation, and every step in between. However, at this point of CGIAR’s transformation there are also some visible hurdles to be found in current structures and work arrangements, some are:

² Numbers alongside the listing of responses refer to the code number of respondents.

- the great variety of such methodologies and approaches there are, coming from different centres, that address various aspects/ levels/ stages of projects, and now there is difficulty in 'coordinating' among these differing, if all valuable, implementation methods.
- that CGIAR scientists are now swamped with design and coordination of CRPs, and seem to be working pretty independently in this – making it, again, difficult 'coordinating' among these differing, if all valuable, implementation methods.
- there are as many 'implementing groups', facilitators, communities of practice, experts, as there are good, necessary participatory methods, and these have not yet been mainstreamed or 'coordinated' into programs.

2.4 I think that the CRPs' (and donor) emphasis on 'impact' does create pressures for such partnerships, and for these to go beyond tokenism. What probably has not caught up is the institutional environment, structures, and work arrangements. If anything, these seem to be creating pressures of more 'busy work' without the kind of time for meaningful substantive engagement.

2.5 The wider uptake of those approaches in the near future will depend on how seriously we take the engagement of CGIAR to deliver development outcomes (much more than the focus on poverty, food security and environmental goals itself). If the performance contracts between CRPs/leading centres and the Consortium are serious, then we need to use those methods to achieve the results that we aim for. One example is the very recent call from the Consortium to identify Intermediate Development Outcomes (IDOs). Currently the need for Participatory Impact pathway Methods (PIPA) is highly in demand, because it allows to identify the changes in attitudes, knowledge and skills of partners, next and end-users that a project needs to achieve to deliver results in development. Another example is the pressure to include gender components and to produce solutions that work for women, men, the farmer family. Suddenly input is needed to assure socioeconomic baseline data that includes gender! However the structures and work arrangements are created as we go. Even if the Strategic Research Framework of the CGIAR announced these new conditions a while ago, scientists and science managers only look for those participatory approaches once they identified the need/urgency. The Consortium – in the case of gender or intellectual property rights – tries to offer a community practice type of approach in order to facilitate those work arrangements.

2.6 YES, given that we increasingly focus on more complex challenges characterized by multiple stakeholders with often divergent perspectives and competing goals. The research challenge is no longer limited to managing biophysical and economic components of ag/NRM systems, but involves social arenas where negotiating toward “shared realities” of problems and solutions are imperative.

NO, while there is growing emphasis on inter-disciplinary approaches, the frameworks we use are still largely defined by disciplinary boundaries (and biases). There is still a need to foster an enabling environment for 'transdisciplinary approaches' and a recognition of multiple sources of knowledge (including but not limited to objectivist/ reductionist science).

2.7 There is a new relevance but we have some way to go in CG centres that provide an institutional environment that allows for this. We need to an institutional environment that encompasses both the ‘traditional’ technology-generation research approach with one that places more emphasis on outcomes and impacts.

2.8 I am strong believer that direct interaction with producers through some kind of systematic participatory (social learning) approaches will be a key to the next green revolution. I am saying this because the issues we face are complex (climate adaptation, land and water management, value chains, etc.) and they demand complex interactions between different stakeholders including research, extension, CBOs, micro-finance organizations, etc. I am also saying this because the complex issues we face are knowledge intensive – they are not embedded in easy to disseminate and adopt technologies like seeds. But they also need supply of, for example, different types of machinery, etc. I think the new discussions along innovation systems have elements of participatory approaches but also consider the institutional dimensions but we have to see how these discussions translate into actual replicable models at scale. And I think this should happen or else we will face serious problems. One of the criticisms of participatory methods in general is that they are not cost effective. I think there was some work showing there are indeed cost effective.

2.9 The change to CRPs happened exactly as I left full time employment, and I’ve only been peripherally involved in it – though one meeting I attended in Rome showed far better collaboration and cooperation among centres than had been the norm over my long full time involvement with the CGIAR – so I’m cautiously optimistic about improved uptake of such approaches. I think the relevance certainly remains as high as ever.

2.10 I think there is. The CRPs and some increased funding are creating an environment favouring change. The greater emphasis on outcomes and theories of change with impact pathways should help. The broader inclusion of partners within CRPs if we are able to deliver on our promises, and this takes time. Many national, subregional and regional organizations also have an increased commitment to stakeholder platforms and inclusive research.

2.11 Yes. One of the constraints in the past was the reality that if R4D needs/opportunities were identified in a truly participatory way, those needs may or may not relate to a particular centre's strengths/knowledge base. So cross-CG CRPs make it easier – e.g. if the community identifies water as the primary issue, IWMI scientists and partners can be involved; if about livestock, ILRI comes in, etc.

The incentives are still too much oriented towards competition and not collaboration, however!

2.12 Participatory research has contributed to development of appropriate technologies. However, in the past it has not considered the value chain (from field to market). With the current focus on poverty, food security and environmental goal, the better prospect should:

- consider the whole value chain of all crops concerned; include the perspective of diversification as the end users always find themselves in a production system and always add something to their systems to face challenges;
- include gender perspective in all activities because the needs are never the same for men, women, young and old, poor and rich; develop a strong linkage between farming and markets and involve other stakeholders, mainly from private and public sectors;
- reinforce the link between all actors of the value chain and help them understand the role they are called to play in the development of the value chain.

AfricaRice in particular is thinking/establishing more conducive structures and work arrangement that definitely support this kind of change through what is called 'rice sector development hubs' where all actors of rice value chain will come together, work together with research and extension service for the development of appropriate technologies and better adoption and impact.

2.13 The current enhanced focus on achieving development outcomes and impacts won't create a better prospect for wider uptake of participatory approaches on its own. But, the

current focus makes the participatory approaches more relevant. And therefore should and hopefully will lead the way for wider uptake for participatory approaches. The better prospect for uptake will depend on the CGIAR centres' considering also downstream research and end-user demands, and engaging partners effectively in the process.

If we consider the design and contents of the CGIAR Research Programs as the institutional setting (rules, norms, structure, procedures) within which international agricultural research will take place, it can be said that the CRPs offer (at least potentially) a good environment for broadening the use of participatory approaches. In this sense, many of the CRPs recognize the need of fostering collective action, knowledge sharing and social learning among farmers, market agents, public and private R&D organizations and policy makers at local and national levels in order to achieve their expected research and development outcomes and impacts.

But we observe that the mechanisms to link the CRPs, which are still concentrating their research on global public good, with the national partners to reach beneficiaries are not yet well developed. Regional innovation platforms should be promoted and eventually facilitated by CG centres to play useful roles in fostering R&D methods and strengthening national innovation capacities for promoting pro-poor innovation processes.

2.14 There is potential for uptake in some CRPs more than others. CRP AAS is building its approach from the community outwards which means the use of participatory approaches, facilitation, supporting social learning, etc. One of the programs goals is to work for a CGIAR better able to reach the billion left behind by the Green Revolution through the broader use of such approaches.

2.15 The focus on poverty and impact is conducive to participatory approaches but depending on the way the results-based management is implemented, the process could discourage participation. Setting inflexible targets in a top down manner does not discourage participation, and the way that the reform process has been conducted to date has meant there has been less meaningful involvement of partners than in the past in many CRPs. Struggling to meet tight deadlines, imposed by the consortium, does not leave time for meaningful consultations.

2.16 I think there is a broader recognition of the relevance and indeed the necessity of these types of processes for responding to complex, uncertain and cross-scalar challenges such as

climate change. These types of processes have now entered the mainstream of agriculture and development theory and practice, even though tensions remain around the primacy of local or scientific knowledge and ways of knowing. This may create a space for dialogue around the types of collaboration, action, and change that are possible – and the role that CGIAR centres can play in taking them forward. We have already seen strong examples of these ways of collaboration emerging from CCAFS projects – and these should be able to provide evidence of the “fit” that is already possible with CGIAR.

Survey Question 2:

What would have to be done differently for the CGIAR centres to be more successful (this time around) in mainstreaming/institutionalizing such approaches within projects/centres?

What are some of the key challenges that scientists encounter in institutionalizing such approaches? Any suggestions on how these can be addressed?

Consolidated Responses ³:

1.2 - Scientists need to do more field work in villages not in research stations.

- Scientists need to have sufficient knowledge of local governments, villages and their needs and 'win' positions.
- Scientists need to acquire transdisciplinary attitudes and sufficient knowledge and appreciate of each science, besides biological.
- Scientists need to be rewarded and recognised for such work that requires a great of 'small talks' with stakeholders not just expected to publish papers.
-
- Scientists and administrators need to recognize diversity and local situations and not push a 'one size fits all' approach.
- Scientists develop the general framework and approach and encourage local adaptations for local settings.

1.4 Well, I have touched on some of these above. I think that for applying this to climate change research your biggest challenge will be the difficulties that we have in applying these methods consistently across a wide range of situation. Most PRAs, for example, are bespoke and applied to a specific set of problems and research deliverables. Also when did you last see one that was written up in a form that allows us to draw any general conclusions. This doesn't exactly help us to come up with any kind of meta-analysis that allows them to inform scale issues and interventions. I am all for this stuff but we have dropped the ball on a lot of basic methodological challenges over the last 25 years. If we are unable to get beyond the

³ * Numbers alongside the listing of responses refer to the code number of respondents.

diagnostic stage, because our interpretation is compromised, what is the point in doing it in the first place?

1.5 To come up with a systematic strategy for the engagement with partners and farmers and farmer groups such that one can stimulate and document farmer knowledge, enable farmer adoption, and analyse the impact-pathway of the technology and impacts. Like in Bangladesh, a policy on water use that caters for win-win solution is much needed to ensure wide-scale farmer adoption. Any research should be interdisciplinary such that social scientists and natural/bio-physical scientists work together with various in-country stakeholders. In the Philippines, we were successful in coming up a national policy and generating farmer adoption because the social scientist has been closely working with the water scientist and NARES partners and farmers.

1.6 Scientists in the CGIAR system are influenced heavily by funding sources. Currently, agribusinesses and major foundations such as Gates, Rockefeller, but also AGRA (Alliance for Green Revolution in Africa) are funding many research institutes, and influencing the research agenda in favour of high external input approaches (GR-Green Revolution) GMOs that advance corporate interests, under the guise of “science helping feed the world” and overcoming vulnerability to drought. GR or industrial agriculture focuses mostly on productivity (yield) increase but not on sustainability, resilience to climate changes, and to nutrition. A second challenge is that agroecological techniques to improving farming, which is knowledge-intensive and system-oriented, designed also to build on farmers/livestock systems of knowledge, does not have high level of credibility/ support within agricultural research, compared to reductionist forms of science including plant breeding, manipulation of plant germ plasm. Much more difficult to write peer reviewed papers that reflect agroecological, farming systems approaches, and linkage with improved nutrition, for advancement and promotion.

1.7 Some challenges that come to mind:

- Critical mass of like-minded professionals in their own organizations (e.g. research institutions) – the number of scientists who are convinced of and promote participatory approaches are still small in number within their own institutions and within the scientific research community in general and therefore it is a struggle to be recognized.

- Farmers not accepted as equal partners in formal research and therefore not recognized also as co-authors in scientific publications such as research papers; scientists are therefore reluctant to be involved with farmers in participatory research as their publications co-authored by farmers do not carry the same weight.
- Attitude of the formal scientific community in recognizing farmers as equally (or more) knowledgeable in agriculture and NRM which does not allow for 'true' participation of farmers in ARD. This has led to the fact that farmers also do not respect the contributions and involvement of scientists and researchers in ARD and are not easily accepting of the knowledge they bring to ARD process
- Lack of incentives for scientists to be involved in participatory research such as being eligible for grants, rewards etc.

How these can be addressed:

- Changing curricula within universities and higher educational institutions to create interest and involvement with farmers as partners during studies and internships. This could be internships related to participatory research.
- Engaging policymakers within related government line agencies in participatory development work that is being carried out – putting farmer researchers in direct contact with policymakers through events such as policy meets, innovation fairs, field trips etc. so that there is face-to-face contacts.
- Establishing a comprehensive base of evidence that can speak for itself on the successes of participatory research that could convince an audience that is sceptical or critical.
- Using sound M&E and impact monitoring systems that are capable of measuring the impacts of participatory research – both quantitative and qualitative – and that compare with the systems used in formal research. This calls for tailoring M&E systems that are robust, comprehensive and reliable.
- Building the capacity of women and men farmers to be articulate and to be able to communicate their research experiences and findings in a manner that is acceptable to formal researchers and the ARD community. Such capacity building calls for long-term capacity building processes on the part of development facilitators from different backgrounds.

1.8 Strictly following the PVS protocol and involve women farmers. Despite training many scientists (plant breeders) on PVS and also developing a guidebook, biophysical scientist

shortcut or do not strictly follow the protocol. Thus they bias the selection of lines/varieties by farmers rather than objectively allowing the farmers (raters) to select the lines/varieties they want. Thus we used blind voting methods so that the raters do not know the names of the lines/varieties.

Suggestion: Train social scientists with PVS protocol and involve them in collecting/documenting farmers' feedback during preferential analysis activities held before harvesting rice.

- Allocation of budget for social scientists and biophysical scientists. Funding for PVS maybe given to each NARES team respective institutions, however, the control of the funding allocation often is with the biological scientists. Thus the social scientists are complaining that they never get the funds to enable them to do FGDs with the farmers.
- Involving women farmers in PVS. Although we have imposed a rule to include at least 30% of women in the project activities particularly during the preference analysis and farmer-managed trials, the proportion is still low. The reason is that funds are limited to pay for transportation costs to pick up farmers from different areas.
- Some resistance from research organizations to do PVS. Research managers are hesitant to promote this approach before lines are formally released. There are also fears that lines developed by agricultural research institutions will fall on the hands of private companies who will gain profits especially if the lines are developed by the CGIAR which produce public goods.
- There are research practitioners in CGIAR interested in enhancing local decision-making and joint learning through social learning, participatory research and participatory communication. There is a strong need to change mindsets, attitudes and appreciation of involving farmers especially women farmers.

Suggestion: To organize more workshops for biophysical scientists and NARES partners on the importance of social learning, working with men and women farmers, etc.

1.9 First of all, project scientists involved in leading and supporting CCAFS have to be open-minded, participatory, and show commitment to learn from demonstrated work and build the critical research mass comprising balanced composition of interdisciplinary research team including participatory plant breeders. Those scientists who have open source mindset are more innovative in this regards.

Second, working modality of CRP is such a cumbersome that there is virtually no communication between relevant scientists and partners on the ground and other relevant CRPs and non-CROP projects as most them have no clue what other are doing on the ground that are important for CCAFS; communication is limited to institutional focal points and there is no platform and/or culture of social learning for such complex issues and solutions are sought in very linear fashion as usual; most tasks are implemented by connection rather than intellectual debate based upon science. Many national partners are identified who have limited experiences of working on climate change and with community.

CCAFS will never achieve its goals with a business-as-usual approach to communication and decision support; and tools/methods/research approaches being employed. Vulnerability assessment is too superficial and there are no participatory tools and methods in place that try to have deeper understanding how so far farming communities are able to cope adversity and how farmer seed system be strengthened and consolidate roles of farmers in managing, conserving, innovating and promoting climate smart good practices.

1.10 Not all biological scientists (especially if they hold key administrative and decision-making role) are accepting the importance of getting farmers' participation – to solve this, need to further create awareness on social learning, participatory approaches and even the gender perspective in climate change research. Women for instance, have increasing role to play in agricultural/rural development.

Voluminous information and products of climate change research are available but are not packaged into usable form that the farmers can use; the use of web-based platform that provide immediate access to information by farmers is not given due attention compared to the attention given to other decision support systems/tools for researchers, project managers or project decision makers.

Institutions that are expected to make use of the knowledge generated from research are not involved at the start and even planning stage, that they do not have the sense of ownership, they are not properly consulted and trained on how to finally use the decision support tools.

1.13 In my experience, the key challenges that agricultural scientists have is their deep desire to ensure that others know what they know....but because they are agriculture scientists and not social scientists (particularly in learning pedagogy) they often make the mistake that all

that is needed is to tell others what they know. This is not about social learning and enhancing adaptive capacity. The way we want to address this is to begin with defining community research agendas and then engaging researchers with communities to help the communities themselves generate research and analyse results. It moves this from doing research 'for' communities to doing research 'with' communities. Not all scientists will want to engage at this level as it might not be as scientifically stimulating. That is okay as there is a need for traditional more formal science as well.

1.14 One of the key challenges is lack of information and awareness about the direct effect of climate change. Concrete data must be provided on the direct effect of climate change on crops and intervention that help mitigate or strategies that can help crops (and humans) adapt to climate change. Farmers often have the attitude of 'to see is to believe', therefore experiential learning can provide firsthand information that would increase knowledge and awareness.

1.15 I would like to refer to the IAASTD research report and suggest that you try to interview some of these scientists to find out what challenges they have encountered. It's now mainly NGOs that use the IAASTD findings, but I don't see a lot of scientists referring to the findings.

1.16 There has to be space and flexibility in the work to follow priorities and approaches identified by communities/participants rather than being technology or science driven.

Options to make this possible are projects that focus on learning-participatory analysis and planning, and having flexible funds that can support research and field testing based on agreement between communities and researchers.

2.1 In any effort to change organizations or institutions, it is imperative that support comes from the top of the organization. DGs need to understand not only the donor requests for such an approach, but embrace it themselves as the only way to sustainable changes in development. If the CGs are genuinely committed to impact (rather than outputs), they must receive not only encouragement from the administrative structure to embrace and utilize a systems approach, but rewards as well.

2.2 Demonstrate the value of social sciences and the importance of participation. Of course not all research projects can incorporate participation (e.g. development of bioengineered crops), however with hiring more social scientists should allow for more centres to change their attitudes about institutionalizing participatory approaches. Centres could also mandate the combination of social and natural sciences in all research projects for better integration of participatory approaches in research.

2.3 I really don't know. There seems to be no argument that participatory approaches need to be mainstreamed into the system, but political will and the necessary funding are slow in coming (even if it is getting better). I believe in the power of a few strong champions (which we have in the system) but I still see the need for a coordination function, for a formalization of the needs and funds required to implement these methods. There must be a recognition that doing things in a participatory manner is more complicated, yes, more expensive, more chaotic and less 'frameworkable'. But if there is real commitment to participation, then the funds and capacity building to backstop the process must be made available. I think we also need to do a realistic evaluation (removing the veils of evaluation for compliance of funders) of what has happened until now when we have attempted to implement participation in our research projects and see what has worked and what hasn't, etc.

2.4 This needs to be recognized and rewarded. Currently the emphasis is still on 'peer reviewed' publications. Also need to select and mentor new staff so that they will pay attention to more than publications.

2.5 I think we go the right way, also we are a bit too slow: The incentives structure must be in place. The requirement to deliver outcomes in term of development is a key step.

Scientific publications must be considered as only one contribution to knowledge for development. Other knowledge products and its effects must be compensated. The statement in favour of Open Access as a working principle in the CG is another good and crucial change that already happens. The other important difference lies in the kind of partnerships we engage in: We need to connect to development actors (civil society) much more strategically.

2.6 While 'specialists' will continue to play an important role, there is also a need to build a critical mass of scientists who can step back and take the broader perspective on socio-technical systems.

2.7 We need a new institutional environment. The shift from a traditional technology-generation focus to an organization that maintains this scientific excellence while simultaneously encompassing a greater emphasis on outcomes and impacts will take time. Some existing staff may no longer have the skill sets to meet future challenges and may need to be replaced. Furthermore, upgrading of support service partnerships are needed to complement internal capability, such services include information and communication technologies. Senior management in centres have a key role to play in fostering this new institutional environment.

2.8 I think the clear drive for showing research 'outcomes' will provide powerful incentives for engaging in participatory methods. This is because outcomes will 'NOT GROW ON TREES', they have to be facilitated thorough some kind of participatory approaches involving all relevant stakeholders. This may also provide feedback to research showing the gaps in participatory approaches in the research itself, which shows that such leads to misdiagnosis and hence production of unsuitable research products at least in theory. But again I think the push for outcomes will be the key. My only worry is that I do not see explicit allocation of resources for the process of facilitating the achievement of outcomes.

2.9 I have worked at a CGIAR centre, which has been comparatively receptive to these kinds of approaches; but my impression from many conversations with other social scientists is that such receptivity has been the exception. That definitely has to change. There has to be a recognition that social science has its own legitimate research issues, methods, approaches, etc., that it's not just the handmaiden of biophysical scientific needs. The institutional culture has to evolve to value collaboration, patience with each other, understanding of the philosophical differences discussed by Eigenbrode, which all have practical implications. (Source: Employing Philosophical Dialogue in Collaborative Science by Sanford D. Eigenbrode, Michael O'Rourke, J.D. Wulforth, David M. Althoff, Caren S. Goldberg, Kaylani Merrill, Wayne Morse, Max Nielsen-Pincus, Jennifer Stephens, Leigh Winowiecki and Nilsa A. Bosque-Perez, BioScience, January 2007, Vol. 57, No. 1, page 55.)

Another potentially, last resort and powerful approach is to tie funding to effective collaboration (as was done within CRP6.2, regarding gender – experts were provided, discussions were encouraged, issues were brought up).

2.10 We need to have more action research on partnerships and how methods actually play out with feedback loops to learning. Mechanistic blue prints won't work and this is always the challenge as we go to scale. We need platforms and networks which encourage learning about methods as well as translational research linked to CG centres' more upstream work to ensure relevance.

2.11 a.) More social scientists (that are experienced; we've always been good at bringing in young researchers and students that are not yet experienced enough to produce top quality science (I.e. rigorous research/survey design; sampling frames, etc.)

b.) Joint (e.g. Cross-CRP/centre) focus on particular research landscapes/sites.

2.12 The CGIAR centres should bring in the new structure, the involvement of all value chain actors in the process of diagnosis, baseline studies, technology development, technology testing and then the dissemination of new technology. All will be done at a concentrated level before the wider dissemination and the impact assessment. CGIAR should continue working closely with the National Agricultural Research and Extension Systems (NARES) because they know better what is happening in their environments.

2.13 The importance of development outcomes and impacts, and partner capacity building must be prioritized at the same level (or even higher) as research outcomes and technology generation. National partners should be engaged as virtually equal R&D partners in our projects at all levels when possible.

2.14 Mainstreaming this time round will require greater support from centre leadership; pay greater attention to quality of process; be explicit about the behavioural changes that participatory approaches are expected to influence, and monitoring them; and be better at providing evidence of what works and what doesn't.

2.15 It needs to be built into the results-based management process. Intermediate development outcomes related to social learning and to participation need to be developed and included.

2.16 Look at the incentive structures and policies that currently guide researchers in the system. Are outputs that can be co-produced with communities viewed as "high impact"? At what stage are communities typically engaged in research processes? Are there flexible

mechanisms for financing work that is initiated by communities or partners as opposed to CG centres?

- Review how stories of success and impact through these approaches are being communicated internally to the CG centres? Are researchers hearing what they might be able to do differently from their own peers?
- Establish a community of practice among early adopters and champions that engages with other potential adopters of these practices both formally and informally.
- Establish metrics for monitoring the impacts and outcomes of these approaches, and for tracking the adoption of these practices within the CG centres.
- Ensure there are feedback loops within the CG system to bring this evidence into future planning and strategies.

Survey Question 3:

Do you think that future research to address the causes/impacts of climate change could draw lessons from past (participatory) work? Why and how?

Climate change research could draw lessons from past work (in participatory research and participatory communications and social learning). Yes/No?

If you agree please elaborate why?

Consolidated Responses ⁴:

1.2 Climate change mitigation requires both local actions that communities need to be motivated to undertake. The motivation is at different layers, central government, provincial government, district officials, local farmer leaders, village clubs and farmers. Participatory approaches are necessary to leverage not only support but local funds to participate in the joint effort. In order for various stakeholders to participate each group have different 'win' positions and stakeholder participatory process need to manage such relationships to ensure each stakeholder's 'win' position is satisfied.

1.3 It's a no-brainer. Even if it is done badly, some kind of stakeholder participation process will introduce perspectives and insights that researchers would not possess if they didn't talk to other stakeholders from outside their local networks. To me there are challenges that we still need to address in order to really capitalize on what these approaches can deliver; e.g. how do we avoid introducing bias (hearing what people think we want to know), how do we build networks that operate efficiently and include the right people and, most importantly, how do we synthesise the knowledge that we acquire from stakeholder networks and feed this into the action process. This last issue is probably even more of a problem for an area like climate change where at least some of that action must come at scale. Good luck!

1.4 Yes. The farmer participatory research promoted farmer adaptation of the AWD technology and social learning that generated the scaling-up and scaling-out of AWD resulting to institutionalization (through policy) and farmer adoption.

⁴ Numbers alongside the listing of responses refer to the code number of respondents.

1.5 Yes, because key to Climate Change Adaptation is promoting not just technologies but also the adaptive and innovative capacity of rural communities, small scale farmers and pastoralists, as they find solutions. Participatory video of concrete practical experiences can be an effective tool in identify and scaling practical techniques for adaptation, and stimulate further innovation.

1.6 Yes, most participatory research involves analysing existing problems and looking for solutions together with a range of stakeholders. Climate change is one among many problems faced by poor smallholder farming communities; and, therefore, the approaches in other situations can be used/adapted for this situation.

1.9 Participatory work such as participatory crop improvement which includes use of farmer selected materials for specific niche (grassroots breeding, PVS and PPB/COB) can be a strategy for coping CC vulnerability. Communities involved in millions of FFS, CBM, Community seed bank, seed producers group etc. in different names can be considered as local institutions. Most of CBOs try to enhance knowledge on rich agricultural biodiversity and use them to their local situation. The challenge is to improve capacity of local level institution in CC adaptation and showing them how portfolio of diverse integrated farming system (crop-tree-animals), species and varieties/traits be used to address local adversity. Entry points of such intervention is local seed system and make it more open source so that access and availability of locally adaptive varieties are broaden so that there is flexibility for selection and choice when situation arise. Relevance of research will improve greatly if CRP and CG scientists spend quality of time with the target groups, talk less listen more and create enabling environment so that farmers can make self directed decision making. Before that they need to question themselves “whose lives we would like to change?” and once they are crystal clear on that success is not far behind.

1.10 Yes, eliciting farmers' perspective is crucial to adoption decisions; they have a sense of ownership, they know the situation better than researchers, they are 'natural experimenters' and should be partners of researchers in doing research on complexity of agricultural situation because of the impacts of changing climate; farmers do make decision in relation to the overall scenario and what is the view of the community or farmers' group; farmer-to-farmer linkages in communication and delivery of information in the rural areas is critical factor in bringing results of research to target beneficiaries – these communication linkages can be

tapped to speed up the delivery of outputs to users. Innovation-development should involve not just technology development but also methodological innovations as well, and these may include farmer participatory research and participatory research planning and management.

1.13 Agree. Our work on adaptive capacity is clearly focused on communities' ability to be more innovative; quicker to adopt and adapt science, technologies and market opportunities; and share this innovative and learning capacity with other farmers and communities. These are all linked. Indeed, one of the challenges I see is how to integrate participatory communications into scaling up strategies that are both effective and sustainable. All of this is deeply embedded in social learning theory and practice.

1.14 Yes. Knowledge and understanding of climate change (how it happens, why it happens) and its effect on human population and the environment as a whole is important in making people aware and encourage them to change some practices that contribute to climate change.

1.15 If we understand participatory research as involving different stakeholders, including NGOs, CBOs and Farmer Organisations, clearly these 'non-scientific' (depends on the definition of science) actors not only have the knowledge basis from their practical experience (indigenous knowledge), but also adapt the new insights in their farm and field realities. How can participatory action research help these stakeholders in meeting these challenges?

1.16 If it will be relevant to ongoing concerns and challenges faced by poor in high risk areas then how can climate change research not involve participatory research and communication and social learning? Communities and individuals are already adapting and innovating to cope with climate variability and environmental changes of which climate change is a part. There are lessons and ideas to take up from this experience, and adaptation is a process which has all of these elements.

2.1 Of course! All disciplines should embrace and utilize a participatory approach to their efforts, not only because it works, but because it is the only sustainable route to long term change. Using interdisciplinary teams of scientists (facilitated by someone skilled in participatory techniques) is the fastest way to introduce the approach and methods and help shift the consciousness to integrating both social and technical sciences.

2.2 I am not sure I completely understand this question. Past work can always be built upon where (more) participatory research could be included by using a suite of participatory research tools to understand causes/impacts.

2.3 I am not sure about this one either. I still see a very big distance between the models that are used to assess the causes and impacts of CC – and the 'intervention suggestions' that come from them – and the lessons we have learnt doing participatory work. I anticipate we will find most of the valuable lessons from participatory initiatives are at a small scale, very local level, while the discourse of climate change is still a large(r)-scale, aggregate level. The concepts of CC and their implications are very difficult to translate into the local community levels. I can only hope that we will be able to get there someday, but not soon for sure.

2.4 Much of the 'climate smart agriculture' that is being discussed now is similar (or the same) as much of the older natural resource management. There are similar issues that arise in the institutional area – what is needed are coordination mechanisms to build cooperation and trust among neighbours.

2.5 Yes, definitively. The challenge is not to reinvent the rules and learn from past experience, while allowing time for the current projects and actors to go through their social learning process in order to incorporate the lessons learnt from the past.

2.6 YES, climate change shares several key features of the 'problematic situation' associated with other sustainability-oriented R&D challenges – multiple stakeholders, nested systems and adaptive learning to external environments under continuing transition.

2.7 With respect to impacts, my concern is that climate smart agricultural technologies and practices are just the latest in a long list of technologies that researchers and development have developed over the last decades and subsequently promoted in rural areas. The truth is that the benefits from these technological innovations have often not reached the majority of resource-poor farmers cultivating marginal lands because farmers have not readily adopted them. The reasons behind farmer adoption or non-adoption of technologies are complex but we can learn much from previous research on farmers' reluctance to adopt soil and water technologies. (Hudson, N.W. 1991. A Study of the Reasons for Success and Failure of Soil Conservation Projects. Soils Bulletin 64, Food and Agriculture Organization of the United

Nations, Rome, Italy.) We can then ensure that we do not commit the same mistakes. Insights into farmers non-adoption of SWC have come from past participatory work.

There is more chance of farmer adoption and adaptation of climate smart technologies and practices if farmers themselves are involved in the development of these technologies and practices. Farmer participation, however, ranges from passive (where participation is little more than politically correct rhetoric) to active (where farmers are genuinely involved in problem identification and the development of appropriate solutions). Researchers and development practitioners need to facilitate the active participation of farmers; in this way, they can develop technologies that address farmers' priority needs i.e. 'scratch where there is itching'.

2.8 As I noted if the focus remains achieving outcomes, then more participatory approaches will be encouraged. I think progress should not be measured by how a research program is popular or mobilizes good influence for big events, conferences, etc., although these are necessary elements they are not sufficient. But progress should be measured with outcomes. This way temporary euphoria and excitement without results can be avoided.

2.9 Absolutely. Addressing climate change, whether mitigation or adaptation, is going to require changes in people's behaviour. Suggesting or mandating change from on high has long proven fraught with difficulties and fatal errors. The human variability (along with the environmental variability) globally means we simply cannot decide what the answer is and apply across the board. That doesn't work. We really need to be tailoring both mitigation and adaptation efforts to local contexts, and that will necessitate the help of local people – a shared learning approach that analyses, plans, mitigates/adapts, monitors what happens, and improves on initial results, in an iterative manner.

This also means big changes in the attitudes of officials who are likely to be running such processes – one of the biggest challenges is how to make bureaucracies more flexible and responsive to local realities, to bottom up kinds of feedback. That applies to many scientists too, who may think they have the answers (quite unaware of their own level of ignorance about social phenomena – and for social scientists, their ignorance about biophysical phenomena).

2.10 Absolutely. Many of the principles of identifying problems and developing technologies and institutional solutions applied in a more static context will be relevant to climate change issues.

2.11 Yes; we probably have an opportunity now to pull together diverse bits of research done by different centres/partners focusing on the kinds of changes in practices that are going to be needed to deal with a changing climate. It's going to take improvements in water, soil, land, crops, agroforestry, and livestock management. We should also be building on comparative advantages and strengths of different centres – e.g. IFPRI's household panel (quant) surveys, and CIAT's participatory work, for example.

2.12 Yes. We should start to understand how farming populations live the climate change, how they perceive the climate change, how they cope with the climate change before working together with them to know what will work better for them. Then solutions could be appropriate and work for changes within the farming populations.

2.13 Priority setting and capacity building can be improved by stronger partner involvement, and can improve research outputs on impacts of climate change. Data collection could also be expanded through participatory work because it is important that the climate change scenarios get close to reality and specific agro-ecological and climatic contexts.

Climate change scenarios are still looming! Depending on the local context, past approaches to involve partners, can by all means be considered.

2.14 Yes. I imagine that CCAFS will want to support communities develop the innovative capacity to adapt to climate change. CCAFS should look to learn from experience doing this.

2.15 Yes, definitely, but care must be taken to avoid oversimplification, reliance on perceptions and speculation. A lot of past participatory work, at least with farmers, drew on the very good understanding that farmers had of their contexts. If the future will be different from the past, then the way farmers participate and the type of information and knowledge that they contribute to the process will be different. Social learning will be an essential part of that.

2.16 Certainly, around methodologies, approaches to facilitation and supporting innovation, for example.

Appendix 4: Promising cases



Promising Approaches for CCAFS Theme 4

To consider in their
Social Learning efforts

Compiled/Adapted by:

Julian Gonsalves Ph.D.

for CCAFs theme 4 stocktaking assignment

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BOX 1: PARTICIPATORY IMPACT PATHWAYS ANALYSIS: A PRACTICAL METHOD FOR PROJECT PLANNING AND EVALUATION

Boru Douthwaite, Sophie Alvarez, Graham Thiele and Ronald Mackay

Participatory Impact Pathways Analysis (PIPA) is a practical planning, and monitoring and evaluation approach developed for use with complex projects in the water and food sectors. PIPA begins with a participatory workshop where stakeholders make explicit their assumptions about how their project will achieve an impact. Participants construct problem trees, carry out a visioning exercise and draw network maps to help them clarify their 'impact pathways. These are then articulated in two logic models. The outcomes logic model describes the project's medium term objectives in the form of hypotheses: which actors need to change, what those changes are and which strategies are needed to realise these changes. The impact logic model describes how, by helping to achieve the expected outcomes, the project will impact on people's livelihoods. Participants derive outcome targets and milestones which are regularly revisited and revised as part of project monitoring and evaluation (M&E). PIPA goes beyond the traditional use of logic models and log frames by engaging stakeholders in a structured participatory process, promoting learning and providing a framework for 'action research' on processes of change.

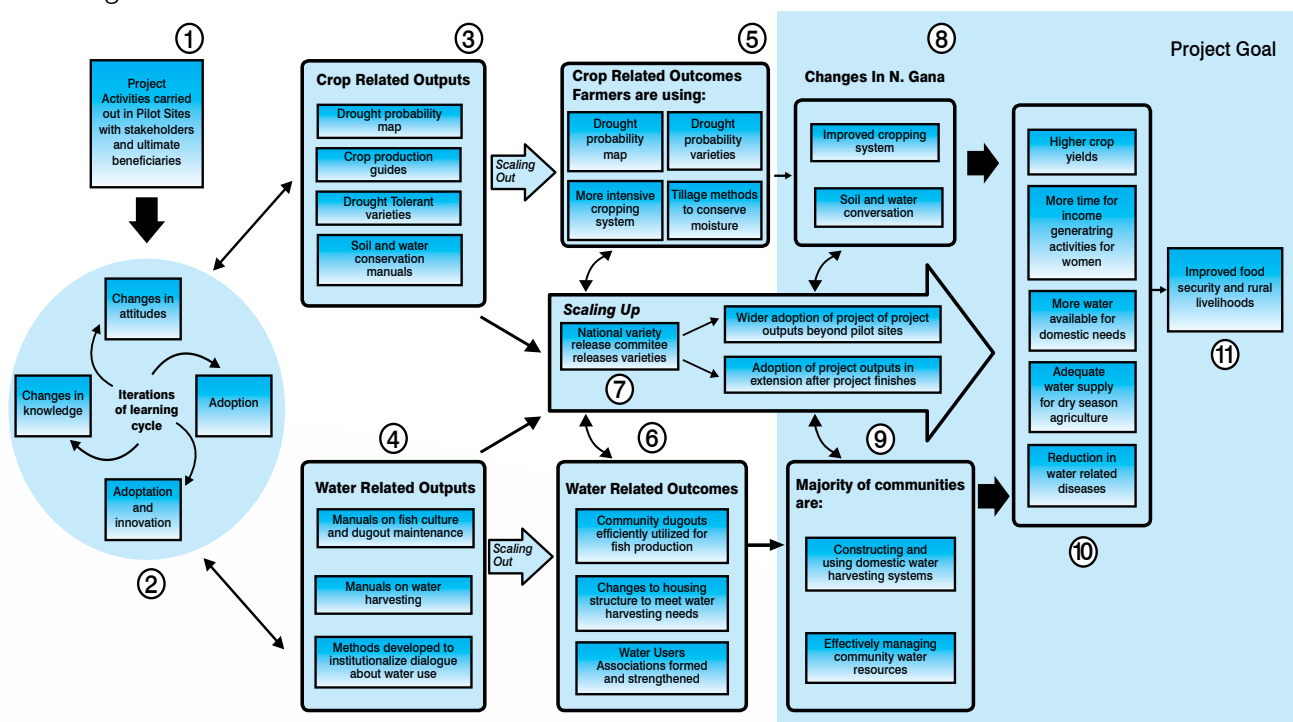


Figure 1. Example of an impact logic model for the CPWF Strategic Innovations in Dryland Farming Project

Conclusions

Participatory Impact Pathways Analysis (PIPA) is a relatively young and experimental approach that involves the participatory generation of impact pathways and their subsequent use. Although this brief focuses on monitoring and evaluation, PIPA is also used for ex-ante and ex-post impact assessment. We encourage readers to experiment with PIPA and contribute to its development. More information on all aspects of PIPA, including an on-line manual, can be found at <http://impactpathways.pbwiki.com>.

Source: Participatory Impact Pathways Analysis: A practical method for project planning and evaluation Boru Douthwaite, Sophie Alvarez, Graham Thiele and Ronald Mackay ILAC Brief 17 2008 (Douthwaite 2008)

¹ The Participatory Impact Pathways Analysis Wiki contains more information about PIPA: <http://impactpathways.pbwiki.com>
² EULACIAS - The European-Latin American Project on Co-Innovation in Agricultural Ecosystems

BOX 2: LEARNING ALLIANCES

The Learning Alliances approach was used by the International Center for Tropical Agriculture (CIAT), an international research institute based in Cali, Colombia, as a way to generate knowledge and foster innovation processes. The authors indicated that it can be used to “strengthen capacities, generate and document development outcomes, identify future research needs or areas for collaboration, and inform public and private sector policy decisions” (Lundy, Gottret and Ashby, 2005).

CIAT first experimented with this approach in 2000 in collaboration with CARE Nicaragua and eight local partners in 10 municipalities. From there the idea moved to eastern Africa, where a six-nation learning alliance was established with the East Africa regional office of Catholic Relief Services (CRS). These two experiences constitute a first phase of work, where the basic concepts of learning alliances were developed, tools were tested and promising initial results were achieved. More information can be found on the ILAC Brief attached.

Key principles for successful learning alliances

- Clear objectives (what does each organization bring to the alliance?)
- Shared responsibilities, costs and credit (since it seeks to benefit all, responsibilities should be shared)
- Outputs as inputs (outputs are used as inputs in the process of rural innovation)
- Differentiated learning mechanisms (more than one learning mechanism is needed, as participants have different needs; e.g. participatory monitoring and evaluation, innovation histories, conventional impact assessment)
- Long-term, trust-based relationships (it takes time to influence and understand change)

How CIAT implemented Learning Alliances

CIAT implemented the following steps:

1. Identify and convene partner organizations with an interest in rural enterprise development
2. Develop clear objectives, roles and responsibilities for the learning alliance
3. Define specific topics of interest based on partner needs and priorities
4. Implement a double-loop learning cycle for each topic of interest
5. Share results among researchers, practitioners and policymakers



Resources

- 'Improved Management of Agricultural Water in Eastern and Southern Africa' (IMAWESA) Program. <http://imawesa.info/wp-content/uploads/2011/12/Learning-Alliances-Concept...>
- Wastewater Agriculture and Sanitation for Poverty Alleviation (WASPA Asia) <http://www.iwmi.cgiar.org/waspa/learnAli.htm>
- IRC International Water and Sanitation Centre http://www.award.org.za/File_uploads/File/Learning%20alliances.pdf
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Sources: Lundy, M., Gottret, M.V. and Ashby, J. (2005) *Learning Alliances: An approach for building multistakeholder innovation systems* ILAC Brief No. 8. Rome, Institutional Learning and Change (ILAC) Initiative. http://www.cgiarilac.org/files/ILAC_Brief08_alliances_0.pdf

BOX 3: LEARNING ALLIANCES AS A VEHICLE FOR SCALING OUT

Mark Lundy

Learning Alliances (LA) can be understood as a process undertaken jointly by Research and Development (R&D) agencies through which research outputs are shared, adapted, used and innovated upon. This is done to strengthen local capacities, improve the research outputs, generate and document development outcomes, and identify future research needs and potential areas of collaboration.

The LA process begins with the identification of research outputs or development outcomes susceptible to scaling out by partners. It is followed by one or many adaptation and learning cycles, and is completed with the detection of new research demands, which feedback into the research process, and contribute to the generation of improved livelihood or policy outcomes. Figure 1 shows the LA process.

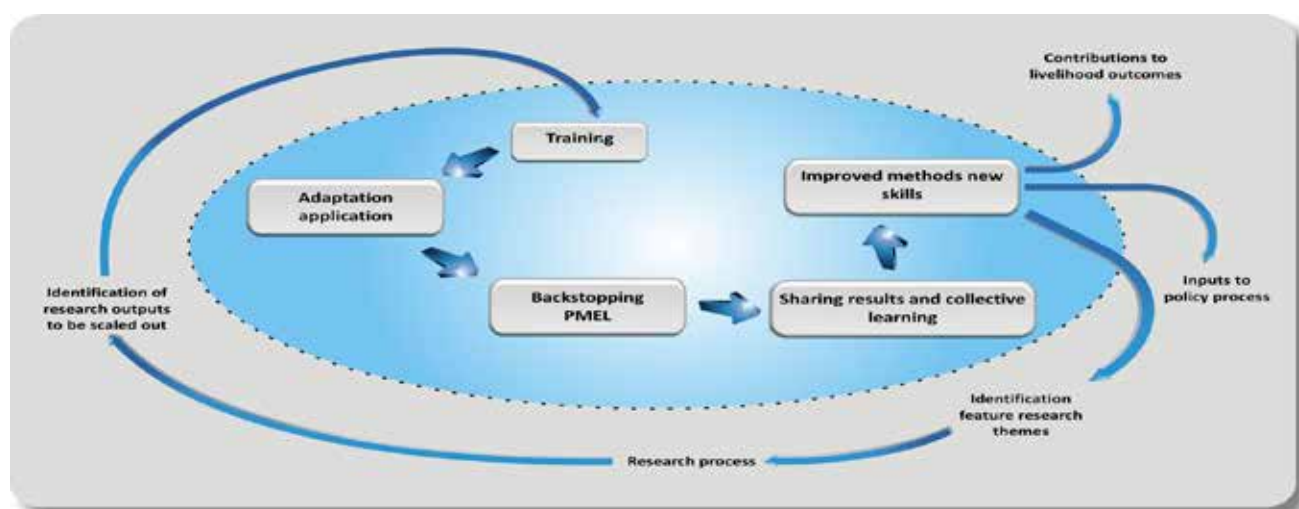


Figure 1. The Learning Alliance process (PMEL= participatory monitoring, evaluation and learning)

Several key issues need to be managed for an LA to be successful, as outlined below.

Clear objectives

Clear objectives based on the needs, capacities, and interests of the participating organizations and individuals must be defined. What does each organization bring to the alliance? What complementarities or gaps exist? What does each organization hope to achieve through this collaboration? Answers to these questions, and an overarching cooperative agreement are helpful first steps. In the real world, however, clarity on these issues is often only achieved through practice.

Shared responsibilities and costs

An LA seeks to benefit both parties: therefore responsibilities and costs should be shared. This is imperative at the beginning of such relationships where funds for scaling out (from the research side) or training (from the development side) are often tied to project budgets that are difficult to modify in the short term. In the future, joint proposals for funding may present a good vehicle for supporting these activities.

Outputs as inputs

In the myriad contexts in which development occurs, there are no set answers. As such, LAs view research outputs as inputs to processes of rural innovation that are place and time specific. Methods and tools will change as users adapt them to their needs and realities. Understanding why adaptations occur, if they are positive or negative in terms of livelihood outcomes, and documenting and sharing lessons learned is the goal.

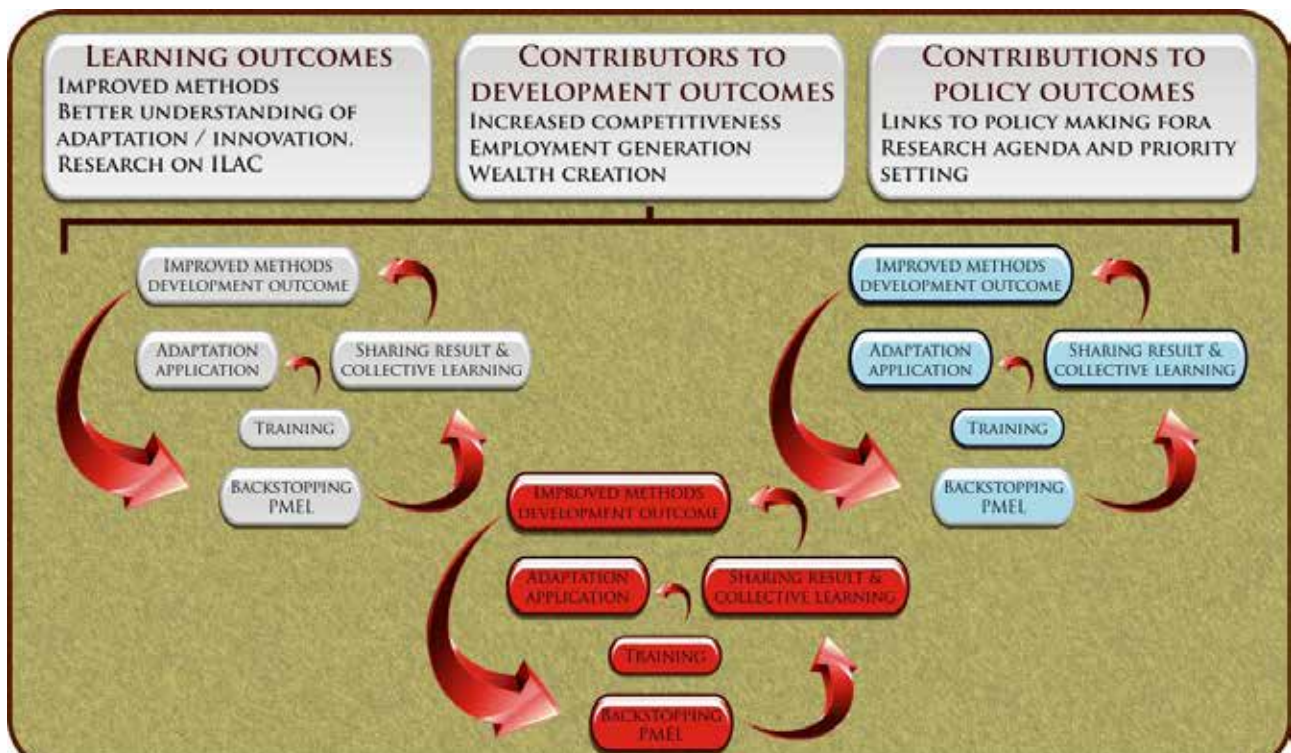
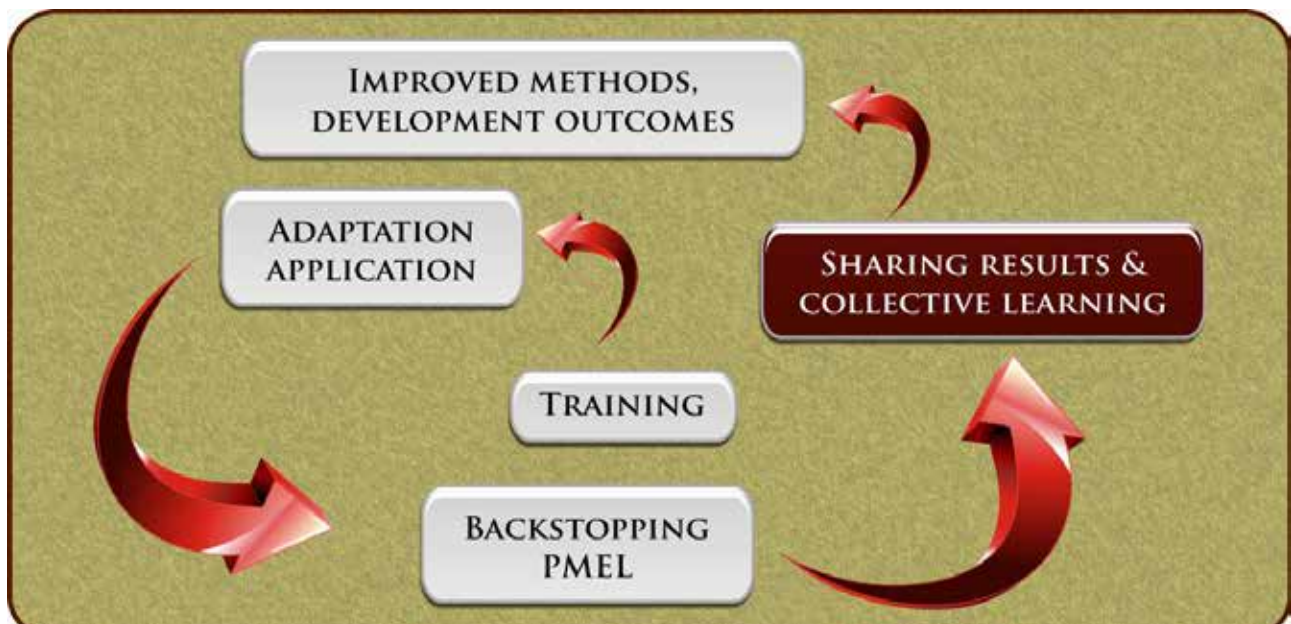
Source: *Scaling Up and Out: Achieving Widespread Impact through Agricultural Research (Economics and Impact Series 3- CIAT)* Edited by: Douglas Pachico and Sam Fujisaka: Chapter 14 of *Learning Alliances with Development Partners: A Framework for Scaling Out Research Results* page 226-227 by: Mark Lundy.



BOX 4: WHAT IS A LEARNING ALLIANCE?

A learning alliance:

- Has clear objectives based on the needs, capacities and interests of the participating organizations and individuals.
- Shares responsibilities and costs between research and development organizations.
- Views scientific outputs as inputs for processes of rural innovation.
- Includes differentiated mechanisms of collaborative learning relevant for different participants ranging from log frames to Participatory Monitoring and Evaluation (PME) & Learning.
- Is a long-term, iterative relationship that seeks synergies between participating organizations that favor the end goal of improved rural livelihoods.



Source: *Learning Alliances with Development Partners: A Framework for Outscaling Research Outputs* by: Mark Lundy Rural Agroenterprise Development Project CIAT Annual Review, December 2002; http://webapp.ciat.cgiar.org/agroempresas/pdf/learning_alliances.pdf

BOX 5: INNOVATION PLATFORMS

Innovation platforms bring together multiple stakeholders (researchers, farmers, national and local level governmental agencies, non-governmental organizations and other actors) and shape the nature of research and development interventions in a participatory and empowering way that supposedly guarantees improved sustainability of water and food research and development interventions. But the way forward is daunting. To achieve change and progress, one has to change, at various levels, and together.

This interactive session sheds light on the nature of these changes. Andre van Rooyen, one of the presenters for this session, stressed some of the key lessons around the changes that had to happen to let innovation platforms blossom: Learning to live with change and uncertainty, nurturing diversity, combining multiple knowledge and social learning, shaping and seizing opportunities for self organization. Other speakers and presenters in the session further emphasized the different scales of learning to change around innovation platforms:

- Learning to let go of control – innovation platform processes tend to really exhaust their facilitators and that sometimes they have to learn to step out, for scaling up and local ownership to take the stage;
- Learning to facilitate. This is very different to managing a process. Managing keeps close control. Facilitation implies taking some distance and inviting all parties to find their space and pace to engage;
- Learning to let the project/intervention agenda mingle with and eventually get taken over by the local agenda, if innovation platforms are to be sustainable – a point which is arguable but let us spare this argument for later;
- Learning to practice what we preach, or to lead by example. This implies among others learning to organize meetings and discussions that truly open the space for higher engagement;
- Learning to start research and other interventions from the demand side. Innovation platforms are better off starting where there is pre-existing interest and expertise rather than starting from blank slate;
- Learning to assess impact in other ways: policy impact, behavior change impact, impact in inter-institutional relationships;
- Learning to explore one's own untapped tacit knowledge and discovering ways to unravel it and stimulate organizational and social learning;
- Learning to deal with emotions and power – far from the comfort of objective science;
- Learning to listen to each other, which in spite of the obvious does not readily happen;

In short, researchers – certainly in the CPWF – have no alternative but to carry out collaborative and integrated research. However, they may not realize what this new process entails just yet, let alone accept the consequences of working around innovation platforms.

(This was extracted from a post that was originally published on the blog of the [third International Forum for Water and Food](#). One of the sessions was dedicated to 'innovation platforms'. These are multi-stakeholder platforms around agricultural value chains, linking all important stakeholders from the production of crops or livestock to the consumption. The cooperation and coordination mechanisms of these innovation platforms are very similar to those of learning alliances, and the difficulty of the change process involving all these actors are just as high.)

Innovation Platforms Explained

Push RWM interventions & technologies

Empower & engage actors in RWM strategies

Achieve short term quotas

Achieve sustainable landscapes & improved livelihoods



or



But stakeholders are not coordinated

Farmers: We want to improve landscapes and livelihoods but we are not involved in planning process and our concerns are not recognized.

Gov't Line Depts: We want to make a difference for our people but there are no incentives for different departments to work together to achieve our common goals.



NGOs: We want to support development activities but we can't address the structural factors that underline rural poverty with our limited resources and time

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Local Administration: We have good policies for improving local livelihoods and landscapes but we have problems in implementation



Private sector: We see many business opportunities but we can't realize the benefits in the absence of favorable enabling environment



Development Agents: We spend time working with farmers but we have no budget, transport, incentives and little control over major decisions so can't facilitate development process effectively

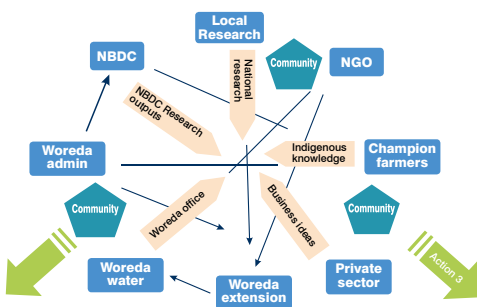


Research Institute & Universities: We have many useful research results and technologies but we have difficulty ensuring their uptake at local level

So what can we do to improve this situation?

Create an Innovation Platform!

An Innovation Platform is a need-based network bringing together stakeholders from different interest groups, disciplines, sectors and organizations to exchange knowledge, generate innovation and develop joint action. Platforms are more than just places to talk; they create opportunities for stakeholders to test solutions to common problems.



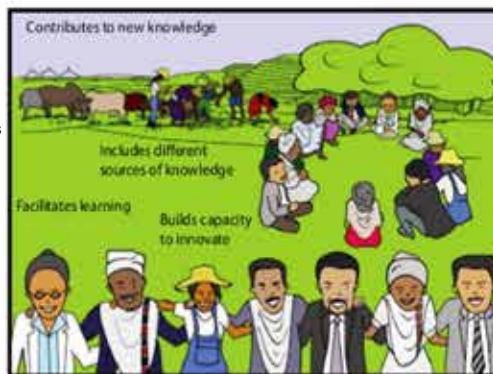
But how do innovation platforms change how things are done?

Changes habitats and practices

Empowers actors

Leads to joint action

Involves wider institutions, policies and markets



Encourages local actors to own the process Address wide range of issues Improves communication between stakeholders



Beth Cullen and Kebebe Ergano

Project for Sustainable Pastoral Systems and Dryland Sheep Production

BOX 6: ADAPTIVE COLLABORATIVE MANAGEMENT

Adaptive Collaborative Management (ACM) is a participatory approach that links forest stakeholders, empowers local communities and their subgroups, and strengthens adaptive capacities. Adaptive collaborative management (ACM) strives to recognize, build on and strengthen local people's capabilities in addressing the challenges that their changing environments pose.

ACM addresses these issues through its success at strengthening people's collective action, learning (and rethinking), while emphasizing local initiative and drive. This process-oriented approach provides guidance on how to involve communities in ameliorating and adapting to the predicted changes in our climate. As ACM evolved, it also became clear that there was a need for both strengthened local institutions and better links from communities to actors operating at other scales.

ACM builds on democratic ideals and concerns for justice and equity, recognizing the importance of power and striving to level playing fields through empowerment processes. It has three themes:

- A horizontal theme in which stakeholders in a particular forest work together toward common goals, addressing and resolving issues of concern for that forest and the people who live in and around it,
- A vertical theme in which local communities and actors at other scales develop effective mechanisms for two-way communication, cooperation and conflict resolution, and
- An 'iterative' or progressive theme wherein stakeholders learn, over time, about the management of their resources and their communities, in the course of actions evolving out of that growing understanding.

ACM - What are the Results?

The most general results of interest to policymakers are the strengthened capacities of communities and local governments. These capacities will help populations cope, both with the new opportunities/dangers of mitigation efforts and in adaptation to the other surprises that climate change will foster.

Because activities and goals are developed within and tailored to individual contexts and participants, each site has different results. Despite the difference however, typically improvements can be seen in the following local level skills: situation analysis, planning, coordination, implementation, monitoring, negotiation, conflict management, facilitation, proposal and other kinds of writing, and networking.

We see improvements in people's understanding of the views of other stakeholders, abilities to act collectively and to learn from their mistakes, and to deal effectively with more powerful stakeholders. We also see broader definitions of leadership, as people come to recognize that effective leadership can mean being inclusive, listening, pulling together diverse views, rather than only being directive and decisive.

Adaptive Collaborative Management – CIFOR's Original Definition, Plus

First version (2001): Adaptive collaborative management (ACM) is a value-adding approach whereby people who have interests in a forest agree to act together to plan, observe and learn from the implementation of their plans while recognizing that plans often fail to achieve their stated objectives. ACM is characterized by conscious efforts among such groups to communicate, collaborate, negotiate, and seek out opportunities to learn collectively about the impacts of their actions.

Supplement (2008): Working with a given group of people requires involving other people acting on other scales—usually at least one level down and one level up (e.g., user groups within a community and district officials above

(Continuation Box 6)

ACM - How is it done?

ACM researchers begin at the community level with a series of context studies to examine historical and political trends, and initial status of human well being and environmental health. In this and subsequent steps, ethnographic skills help them understand how socio-cultural systems work.

A central method in the ACM approach is the process oriented participatory action research (PAR). PAR is a long term, collaborative process in which groups of people act together in iterative cycles of goal setting, analysis, planning, implementing, monitoring, and reassessing progress (See the 'worm', below). This approach requires the skills of a facilitator of such processes. In ACM, this facilitator/researcher also serves as a node, linking groups of people, and, over time, training them in the required skills to strengthen the sustainability of the effort.

Such facilitators/researchers also bring a repertoire of other methods on which they draw, as the information and analysis needs of the participants become clear.

Recent users of the ACM approach have more explicitly involved community, district, and sometimes national level actors (e.g., Bolivia, Indonesia, Nepal, Zimbabwe, and 6 new sites in the CIFOR-ICRAF Landscape Mosaics project) using the same iterative processes. Changing attitudes and approaches among development and research organizations has proved to be an important but slow process.

Why do we need ACM now?

There is growing recognition that many efforts to address problems at local levels have in the past been unnecessarily passive, reactive, and/or purely technological. Effectively addressing climate change will require moving forward with more process-oriented approaches that look to the future, acknowledge local capabilities and opportunities, and build analytical and adaptive capacities at several levels.

To activate communities and local governments on the scale needed for these changes, global actors must recognize the need for clear and meaningful response to local needs.



Source: Adapted from *Adaptive Collaborative Management Can Help Us Cope With Climate Change*; Center for International Forestry Research (CIFOR) Infobrief July 2008, No. 13; http://www.cifor.org/publications/pdf_files/Infobrief/013-infobrief.pdf



BOX 7: COMMUNITY BASED MANAGEMENT IN THE WAKE OF CLIMATE CHANGE

Climate change represents a major threat to agrobiodiversity. One of the ways in which climate change negatively affects agriculture is to change the growing conditions and thus making the current practices and varieties ill-suited in the changed context.

Farmers may not have the capacity and facility to predict climatic variability before crop season or determine which new pest or pathogen will develop or how the rain will fall during the crop season. However, they can and do use a set of crop varieties in agricultural production systems to increase options to buffer against unpredictable change. In this context, agricultural biodiversity has the potential to provide immediate cropping alternatives as well as genetic materials for the further development of stress tolerant varieties.

Strengthening farmer seed systems of a range of neglected crop species and other associated biodiversity promote an open, dynamic and integrated genetic system to cope with climate change at the local level through: i) community based conservation actions (e.g. seed fairs, diversity kits, community based register (CBR), community seed banks, community based seed production schemes) to improve access to and exchange of materials and knowledge, and ii) grassroots breeding, participatory variety selection and participatory plant breeding. This is only possible if the farmer's role as conserver and promoter of diversity and dynamic innovator is consolidated by strengthening their seed system and agronomic practices and they are compensated/rewarded for the services of conservation.

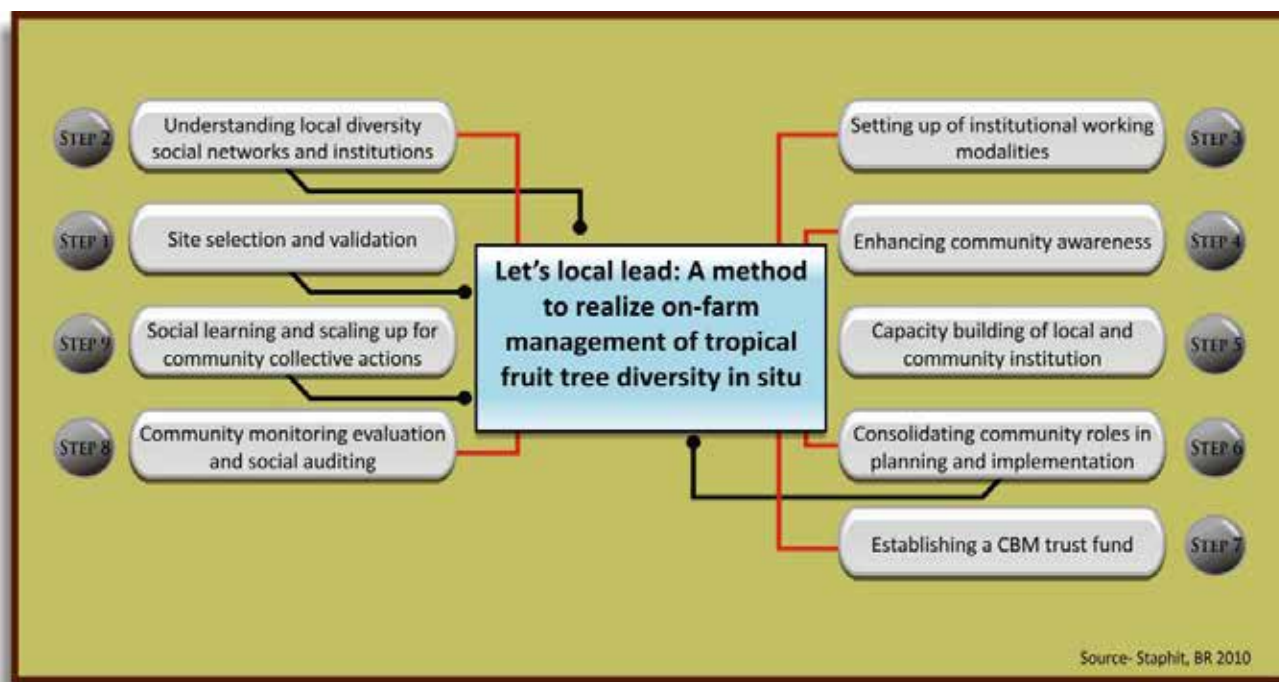
A farmer's ability to search for new adaptive diversity, selection of new traits and exchange of selected materials with friends and relatives are key adaptive strategies for dealing with climatic adversity. To achieve *in situ* (on-farm) conservation, community biodiversity management (CBM) method is employed to empower farming communities to manage their agricultural biodiversity. Community biodiversity management (CBM) is increasingly recognized as a process that contributes to on-farm conservation through the management of landscape, species and genetic diversity. The basic principle of the CBM method is legitimizing the role of locals in the following:

- building on local resources, skill, knowledge, practice, innovation & natural assets (local use of genetic diversity and blending new acquired knowledge and science),
- empowering community and local institutions for sustainable biodiversity management and better governance (social organizations),
- diversifying biodiversity based livelihood options by mobilizing social, human and natural assets (capitalizing sustainable livelihood assets),
- promoting good governance for biodiversity management and eco-friendly approaches, and
- providing a platform for social learning for collective action (social learning institutions) to save and use agricultural biodiversity.

(Continuation Box 7)

The methodology is designed in such a way that locals lead the process and make decisions in the management and use of agricultural biodiversity. The figure below illustrates key steps of community-based management of agricultural biodiversity.

Participatory research methods are used and platforms for farmers and researchers to share and learn from each other are created. The capacity of local institutions are built to assess on-farm diversity, identify elite materials and improve access of useful diversity and make community action plans.



In order to ensure that communities' local organizations are equipped to make decisions about the management of local crop diversity, government agencies and donors must collaborate directly with them in letting the locals lead the effort to save agricultural biodiversity. CBM can ensure that communities have the knowledge and skills and appropriate decision making capacity to manage the agricultural biodiversity to cope with adverse situations.

This note is repackaged from the following sources:

Bhuwon Sthapit¹, Abhishek Subedi², Devra Jarvis³, Hugo Lamers⁴, V Ramanatha Rao⁵ and BMC Reddy⁶; *Community Based Approach to On-farm Conservation and Sustainable Use of Agricultural Biodiversity in Asia*; *Indian J. Plant Genet. Resour.* 25(1): 97–110 (2012); and Bhuwon Sthapit¹, Stefano Padulosi² and Bhag Mal; *Role of On-farm/In situ Conservation and Underutilized Crops in the Wake of Climate Change*; *Indian J. Plant Genet. Resour.* 23(2): 145–156 (2010)



BOX 8: PPB - PARTICIPATORY PLANT BREEDING

The leading practitioners of and early returns to Participatory Plant Breeding

The staunchest supporters of participatory plant breeding share a common background: many years devoted to improving drought-tolerant cereals in low rainfall environments. Two of the leading practitioners are J.R. Witcombe, who is the chief plant breeder at CAZS Natural Resources (CAZS-NR), University of Wales, Bangor, U.K., and S. Ceccarelli, who led the barley breeding program at the International Center for Agricultural Research in Dry Areas (ICARDA) for many years, and is now a consultant to the same program. Ceccarelli is also the coordinator for participatory plant breeding in the Participatory Research and Gender Analysis (PRGA) initiative of the Consultative Group for International Agricultural Research (CGIAR).

Since the mid-1990s, the CAZS-NR group and its partners have worked in participatory plant breeding in several well-known geographic poverty traps and marginal production environments in South Asia. They have focused on cereals, mainly rice and maize, and have had five published success stories characterized by strong early adoption of project varieties (Joshi et al. 2001, Joshi et al. 2002, Virk et al. 2003, Witcombe et al. 2003, and Virk et al. 2005). On average, the 'new' varieties gave 40% heavier yields in farmers' fields than the 'old' varieties farmers had cultivated at the start of the project. Several of these new varieties have been approved for national and/or regional release. The CAZS-NR team has also generated evidence that selecting for specific adaptation is not incompatible with wider adaptation as some of these varieties are performing well in poverty-ridden regions in neighboring countries (Joshi et al. 2007).

The model of participatory plant breeding by the ICARDA Barley Program features four years of on-farm trials and farmer selection (Ceccarelli and Grando 2005, Mangione et al. 2006, and Ceccarelli and Grando 2006). Between 1997 and 2004, the ICARDA Barley Program in Syria totally transformed the locus of their operation from 8,000 plots planted and evaluated on the research station to 8,000 plots planted and evaluated in farmers' fields. Based on initial results in Syria, the team extended their PPB model to nine countries in the Middle East and Africa. In the first complete breeding and selection cycle, farmers selected 12 barley varieties in Syria, 1 in Jordan, 5 in Egypt, 3 in Eritrea, and 2 in Yemen where two lentil varieties have also been selected. Of the selections in Syria, some are already planted on several thousand hectares (Mustafa et al. 2006).

Participatory Plant Breeding

Scientific plant breeding has been one of the main sources of growth in agricultural productivity in the 20th century. It has been called "slow magic" (Pardey 2001). But not all farmers have been touched by the magic. Millions of poor farmers, mostly living in low and uncertain rainfall regions of marginal production potential, have yet to adopt an 'improved' variety. The reasons for this negligible adoption of improved varieties in geographic poverty traps associated with marginal production potential include slower-than-expected progress from biotechnology on drought resistance in major field crops, an under-investment in agricultural research, ineffective formal seed systems, and rigid testing and varietal release procedures.

Bringing information from farmers to bear on conventional plant breeding is one way to improve plant-breeding performance in marginal production regions. It is increasingly common to find crop improvement programs incorporating users' information from men and women farmers, consumers, processors, and traders. The users' information affects/influences decisions on the selection of finished products in what is termed participatory varietal selection. In the last ten years, involving farmers in the early stages of the plant breeding process has also started to pay dividends in what is referred to as participatory plant breeding (PPB) (See Box).



(Continuation Box 8)

The expectation for PPB is high: more adoptable varieties in less time compared to conventional breeding. PPB is seen as a more efficient approach to finding adoptable varieties because selection is largely carried out in the farmer's environment and because farmers' preferences for traits figure prominently in the choice of parental material when 'smart' crosses are made. As specific adaptation is the goal of PPB, a shorter varietal development and dissemination cycle of 5-7 years saves time compared to the 10-15 years conventional plant breeding program where wide adaptation is the objective. Time is saved mainly in varietal testing and seed multiplication.

Though PPB is not a panacea for all the ills that farmers in marginal environments face in adopting improved varieties, PPB should increasingly make its presence felt by expanding varietal choice. The first 10 years of PPB has resulted in a small but thriving literature in plant breeding. In the next ten years, we will have a better appreciation of what works when, where, and why as accumulating experience allows researchers to approximate an ideal of efficient participatory breeding. We should also see examples of induced change on formal seed systems and on varietal testing and release procedures precipitated by the accommodation of PPB products.

We are already beginning to see what PPB is and is not. It is not about 'dumbing-down' science in a time when plant-breeding capacity is at a premium. PPB is about a sharpened focus on client needs in a local context, but broader plant-breeding considerations still need to be factored into decision making on varietal generation and selection (Witcombe et al. 2005).

Summary and Box References

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BOX 9: FARMERS' DIRECT ACCESS TO R & D RESOURCES ACCELERATES LOCAL INNOVATION

Focused funding to local innovation and adaption initiatives adds value to production and enhances local adaptive capacities

In today's volatile and unpredictable world, farmers face both challenges and opportunities created by a myriad of changes: price fluctuations, new markets, climate-change induced problems and issues related to wider political or socio-economic development. To respond to this fast-changing environment, farmers need to search for new and better ways of doing things. In this process, they are not only recipients of new knowledge and practices developed by others but also innovators in their own right (Richards 1985, Reij & Waters-Bayer 2001). Innovation "experts" from government agencies, NGOs and the private sector will be most effective if they work with and strengthen farmers' own experimentation and innovation processes through Participatory Innovation Development (PID) (Critchley et al 1999, Hocdé et al 2008, Huis et al 2007, Scheuermeier et al 2004). This approach helps to strengthen farmers' own capacities to experiment and adapt.

Most conventional agricultural research and development (ARD) funding mechanisms intended to encourage interaction between ARD stakeholders – including farmers – do not effectively support local innovation processes. They are usually managed by formal ARD institutions with little or no influence of farmers and other land-users on funding decisions. As a result, promising local initiatives and innovations rarely receive the support they deserve.

Creating direct farmer access to innovation funding

Inspired by work in decentralised competitive funding in Latin America and elsewhere (Ashby et al 2000, Veldhuizen et al 2005), PROLINNOVA, an international partnership programme promoting local innovation and PID, started to pilot alternative funding mechanisms that allow local innovators to access resources to support their own research in collaboration with other professionals. The Local Innovation Support Funds (LISFs) imply a fundamental change in how research and development (R&D) funding is allocated.

Three central principles of LISFs:

- Funds made accessible directly to farmers or their groups, not via development agencies
- Grants used for innovation, experimentation and learning by and with farmers
- Farmers and their organisations play a strong role in deciding on fund allocation.

Recent action research (2007–11) on LISFs conducted by PROLINNOVA with funds from the Rockefeller Foundation and the Netherlands Government (DGIS) involved eight countries: Cambodia, Ethiopia, Ghana, Kenya, Nepal, South Africa, Tanzania and Uganda. Key LISF performance data were captured in an MsAccess-based monitoring and evaluation (M&E) system. Analysis of the data together with findings of recent impact assessments allowed the country teams to prepare detailed action research reports, which form the basis of this policy brief.

The main purpose of the LISF pilots was to provide recommendations for scaling up and use of LISFs by the formal ARD system, by demonstrating that 1) LISFs work effectively, generate good grant applications that are processed using sound criteria, disburse money on time and monitor its use effectively; 2) LISFs are cost efficient, performing all tasks with acceptable handling and management costs; and 3) LISFs can find a sustainable institutional arrangement that allows them to continue functioning independently beyond the pilot phase.

(Continuation Box 9)

Design and operation of LISFs

LISFs are decentralised to the extent possible to facilitate easy access by smallholders. Farmers send in applications using simple formats to a local fund management committee (FMC), either directly or through a local organisation. Wherever strong farmer/ community organisations exist, the FMC is embedded within them, while external agencies serve as members/advisers. In other cases, a multistakeholder FMC is hosted by a district agricultural office or a local NGO. The FMC screens and generally approves grant applications. Working together in the FMC creates a platform for stakeholder linkages and cooperation with impacts beyond LISF activities.

At national level, a relatively small team gives technical support, develops and shares formats and guidelines, and provides overall quality control. In the initial stages, the quality control role may require checking of all applications approved at the local level before release of grants. As local capacities increase, such checks can be limited to larger grants. The national team also handles the flow of funds to the FMCs and through them to the farmers, except where FMCs have generated funds at their own level.

Effective handling of LISF grants to innovators

The pilot LISFs managed to generate and process a large number of applications from smallholders in a timely fashion. An average of 35 grant applications per year were received and processed in each country, 64% of which met the criteria. In general, the processing of applications from receipt to approval took around 70 days on average, made possible through the decentralized design of the LISFs. The decentralised design provided opportunity for women to access LISFs. More than 40% of individual grant applications were submitted by women.

Typically, LISF innovation grants involve relatively small amounts of money from a donor's point of view. However, they take on greater significance in the hands of smallscale farmers in the pilot countries. Grant volume ranged widely. Smaller grants were mostly used to buy tools to develop a farmer innovation and try it out, or to buy inputs such as seeds for simple experiments by farmers. Larger grants were provided for more complicated, capital-intensive innovations or for joint experimentation activities, including costs of external services such as laboratory analysis, costs of research or extension staff supporting the activity etc.

To enhance ownership, innovators receiving LISF grants were required to cover 15–20% of costs from own resources. Though farmers receive LISF funds to generate public goods – new insights and practices for sharing with others within and beyond their communities – (partial) payback arrangements have been used to generate resources for sustaining LISF operations. Payback is recommended when the funded activities directly lead to increased income of the grantee, when funds cover usual farming costs, and when an experienced community based organisation or farmer group is involved to handle the payback and manage the revolving fund that is formed as a result.

Cost efficiency of LISF

Given the relatively small volumes per grant and the need for capacity building at various levels due to the newness of the approach and the involvement of staff and farmers at local level, a relatively high level of “overhead” could be expected. Current evidence on LISF operation under action-research conditions confirms this to some extent. When costs of action research and capacity building are taken into account, 30–40% of LISFs have actually been disbursed to farmers.



(Continuation Box 9)

Detailed analysis of cost data suggests that efficiency can be further improved, leading to a disbursement forecast of at least 60%. This can be done by phasing out specific action research budget components, increasing the volume of LISF grants to reach economies of scale, reducing costs by streamlining and standardising procedures and formats, and taking into account revolving funds that continue LISF locally from payback on the initial grants.

Evidence of impact

Initial impact studies identified key impact areas (see boxes). They revealed that LISF funding has led to further development of locally relevant, improved agriculture and natural resource management (NRM) practices and systems. This, in turn, has led to livelihood improvements for farmer innovators who have received grants.

The improved local innovations are not yet spreading widely; a longer timeframe is needed to see the impact of LISFs. Farmer capacities have increased in terms of access to information and linkages, self-confidence and recognition within the community and by external agencies, horizontal sharing, joint experimentation and management of innovation funds. Equally important is the increased interest shown by development agents and researchers involved to support farmer-led innovation and research.

Source: Repackaged from PROLINNOVA POLICY BRIEF (LISF2012) Title: Farmers' direct Access to R & D resources accelerates local innovation. http://www.prolinnova.net/sites/default/files/documents/LISF/policybrief_prolinnova_july2012_a4_lr.pdf



BOX 10: BROKERING INNOVATION FOR SUSTAINABLE DEVELOPMENT: THE PAPA ANDINA CASE¹

The inadequate linkage of knowledge generation in agricultural research organizations with policy-making and economic activity is an important barrier to sustainable development and poverty reduction.

Klerkx et al. (2010:390) note that “in the AIS [agricultural innovation systems] approach, innovation is considered the result of a process of networking and interactive learning among a heterogeneous set of actors, such as farmers, input industries, processors, traders, researchers, extensionists, government officials, and civil society organizations.”

Past efforts to strengthen agricultural innovation systems focused mainly on training and organizational capacity development (Horton et al., 2003). Attention is now shifting towards improving incentives for cooperation and strengthening linkages among relevant actors. The importance of having intermediary organizations that link the various actors involved in innovation is becoming recognized (Szogs, 2008; Klerkx et al., 2009; Kristjanson et al., 2009). These intermediaries have been referred to as “innovation intermediaries” or “innovation brokers”².

The Papa Andina Partnership Program, based at the International Potato Center, functions as an innovation broker in the Andean potato sector. As a regional initiative, Papa Andina operates as a “second-level innovation broker,” backstopping national partners who facilitate local innovation processes in their respective countries. Papa Andina works to strengthen local innovation capacity and to foster “innovations in innovation” – the development of more effective ways of bringing stakeholders together to produce innovations that benefit smallscale farmers. There are virtuous feedback loops between first- and second-level innovation brokering functions. Papa Andina has developed approaches to promote fostering innovation brokerage at these two levels.

Papa Andina was designed to strengthen potato research capacity in Bolivia, Ecuador, and Peru through the development of a regional research program. In line with the CGIAR strategy at the time, outlined by de Janvry and Kassam (2004:159), it sought to develop “a regional approach to research planning, priority setting and implementation” involving CIP’s traditional research partners in the Andes – the national potato research programs.

Papa Andina began as a CIP project funded by the Swiss Agency for Development and Cooperation (SDC). It has evolved into a Partnership Program with different donors, and spans the institutional boundaries of CIP and R&D partners in Bolivia, Ecuador, and Peru. Over the years, Papa Andina has managed a portfolio of complementary donor-funded 13 projects that aim to stimulate pro-poor innovation and develop national innovation capacities in the potato sector. All its work has been funded through donor projects, rather than through CIP’s core budget³.

¹ The authors would like to thank the Swiss Agency for Development and Cooperation (SDC) and New Zealand’s International Aid and Development Agency (NZAid) for their support and contributions to the work and results presented in this paper. Thanks also to Rachel Percy and James Smith for useful comments on an earlier version of this paper, to Kay Sayce for editing, and to Cristina Sette for coordinating the publication process.

² Devaux, A., J. Andrade-Piedra, D. Horton, M. Ordinola, G. Thiele, A. Thomann and C. Velasco. 2010. *Brokering Innovation for Sustainable Development: The Papa Andina Case*. ILAC Working Paper 12, Rome, Italy: Institutional Learning and Change Initiative. URL: www.cgiar-ilac.org

³ A CGIAR center’s “core budget” is unrestricted in the sense that center management has discretion over the use of the funds to implement the center’s program. In contrast, “project funds” must be used according to agreements between the center and the donor that specify budgets, output and impact targets, and timelines.

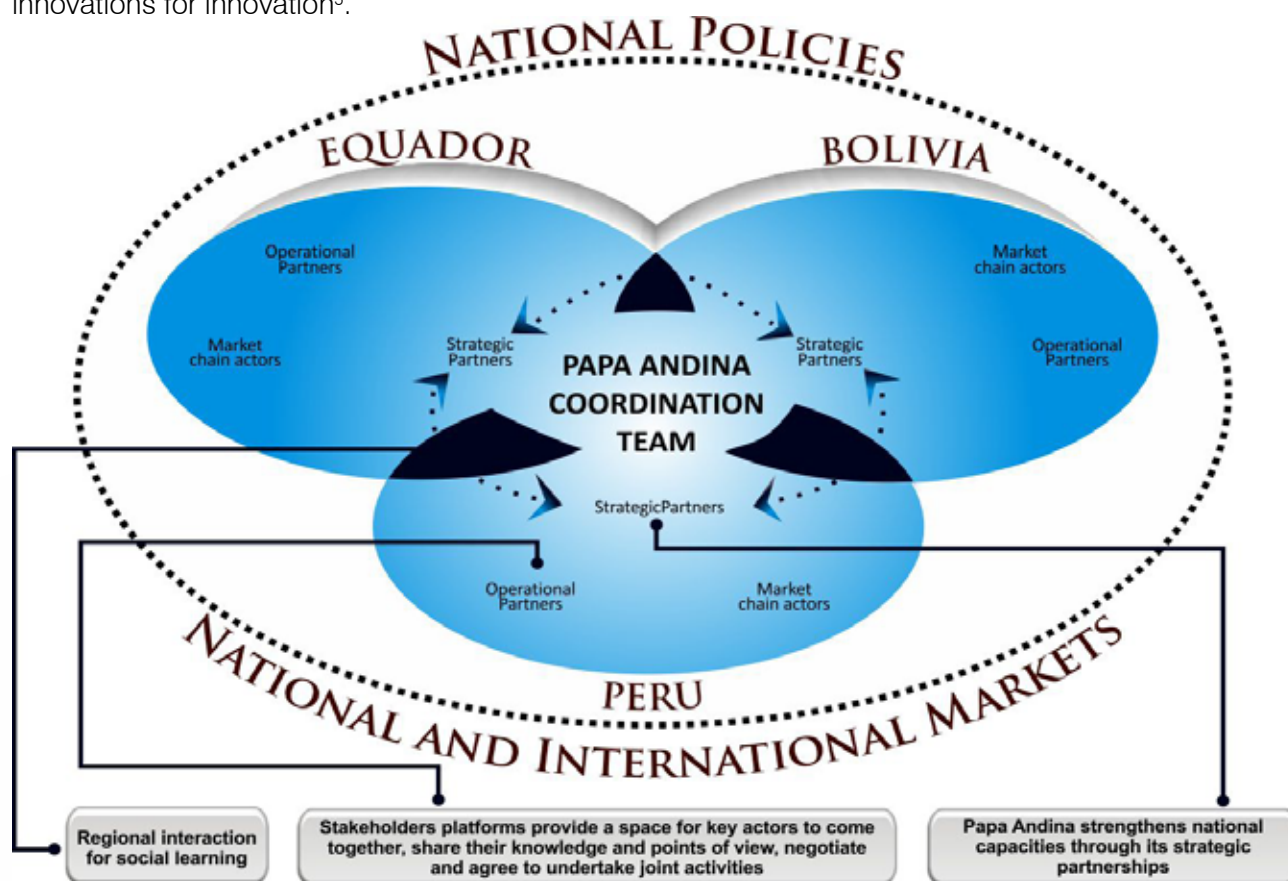


(Continuation Box 10)

Papa Andina's Coordination Team is made up of CIP staff members and consultants based in Peru (3), Bolivia (2), and Ecuador (1). The Papa Andina Coordinator, who is based in Lima, Peru, makes frequent trips to field sites in all three countries and the management style is markedly "horizontal" (Bebbington and Rotondo, 2010: 36). Major decisions are made at Papa Andina's annual meetings or at meetings of the Coordination Committee.

The Coordination Team works closely with focal points and collaborators in one R&D organization in each country. Known as "Strategic Partners", these organizations are: the PROINPA Foundation in Bolivia; the National Potato Program at INIAP in Ecuador; and the INCOPA Project in Peru⁴.

Most of Papa Andina's work in Bolivia, Ecuador and Peru is led by the Strategic Partners and is implemented directly by them or via local organizations known as "Operational Partners" (Figure 1). In this sense, therefore, Papa Andina operates as a second-level innovation broker. The Coordination Team is not directly involved in brokering in-country innovation processes. Instead, it works to support and co-fund the Strategic Partners by creating an appropriate environment or "innovation ecology", facilitating the implementation of innovation processes in each country, and acting as a "broker of innovations for innovation"⁵.



A key Papa Andina strategy is to strengthen the innovation capacity of national partners by delegating responsibilities and authority to them. An external evaluation of Papa Andina found that country-level activities were so closely associated with the Strategic Partners that many Operational Partners, producers, and other stakeholders knew little, if anything, about Papa Andina. They assumed that they were participating in or benefiting from the activities of PROINPA, INIAP, or INCOPA (Bebbington and Rotondo, 2010:38).

⁴ The organizations' names in Spanish are: *Fundación PROINPA (Promoción e Investigación de Productos Andinos)*, Bolivia (www.proinpa.org/); *Programa Nacional de Raíces y Tubérculos rubro Papa (PNRT-Papa)*, INIAP, Ecuador (www.iniap-ecuador.gov.ec/); and *Proyecto INCOPA, Perú* (www.cipotato.org/papandina/incopa/incopa.htm), a coalition of private and public partners that aims to improve small potato farmers' access to markets.

⁵ For a discussion of this term, and some examples, see Hall (2003).



(Continuation Box 10)

The “horizontal evaluation” approach was developed to promote knowledge sharing and collective learning within the Papa Andina network (Thiele et al., 2006, 2007; Bernet et al. 2010). It combines elements of self-assessment and external peer evaluation within the setting of a regional workshop. In these workshops, two groups – a local project team and a group of peers from other organizations – assess the strengths and weaknesses of an experience (usually within a project), and then compare their assessments.

Papa Andina’s horizontal evaluations have a strong regional knowledge-sharing component because most of the peer evaluators come from abroad. There are usually important differences between the self-assessment conducted by the local project team and the assessment by the external peer group. The ensuing dialogue helps both groups fill information gaps and address points of disagreement. No attempt is made to reach broad agreement on the merits of the project. Instead, the local team formulates recommendations for improving the project, and the peer evaluators look at how they can apply lessons learned during the evaluation in their own work back home.

Participants report that these horizontal evaluation workshops have been extremely useful opportunities for learning about the strengths and weaknesses of new R&D approaches, as well as for building common visions, language, and understanding among diverse stakeholders. As a result of horizontal evaluations, many local project teams have significantly altered the way they pursue their innovation agenda. After the workshops, when the peer evaluators return home, they often begin to experiment with things they learned during the evaluation. For example, after the horizontal evaluation of a PMCA project in Peru, Bolivian participants began to work with the PMCA themselves, and subsequently made major contributions to the approach. In contrast, Ecuadorian participants did not see the value of the PMCA in their context, preferring to focus their energies on strengthening farmer organizations.

BOX 11: RESPONSES TO CLIMATE CHANGE: ADAPTATION PATHWAYS TO CHANGE

Climate change has the potential to severely impact coastal and inland environments and ecosystems. All rural communities need to be aware of the potential impacts of climate change, and take measures to adapt, so that they can become resilient to these changes. Only by identifying the risks associated with climate-change, can communities initiate a plan that prepares them to adapt, and thus manage the social, economic, and environmental impacts of climate change on their communities.

While many climate change initiatives have been undertaken in the Pacific region over the past decade, only a few of these have detailed a plan for implementing adaptation actions to respond to climate change. This project, Responding to Climate Change Using an Adaptation Pathways and Decision-making Approach, funded by the Asian Development Bank (ADB), aims to strengthen coastal and marine resource management in the Coral Triangle of the Pacific, by assisting communities in Fiji, Papua New Guinea, Solomon Islands, Timor Leste and Vanuatu to develop their own climate change adaptation implementation plans. The project aims to build capacity among inland and coastal communities living within this region that are dependent on natural resources for their livelihoods, to enable them to respond and adapt to climate related change.

Overview

This project aims to identify key decision-makers within affected communities in the region, and provide guidance on how to develop a long-term action plan, or pathway, that will act as a roadmap to implementing adaptation actions. This decision-based approach is undertaken in collaboration with key stakeholders and decision-makers in target communities, taking into account that the adaptation process is an ongoing and dynamically evolving pathway that will be navigated by decision-makers at all levels in society.

Notable Features of Adaptation Pathways and the Decision-making Approach

- Decision-making, and progress along the adaptation pathway, is focused on tangible thresholds that are relevant to the community.
- Takes into account historical data and risk assessments, and builds upon them, to increase the knowledge base.
- Takes into account contested values, particularly those related to visions of the future.
- It is scale-neutral and can be used in planning and decision-making processes at local and/or national levels simultaneously, allowing communities and regions to develop a nested approach to adapting to climate change.
- Considers climate-change adaptation a dynamic and ongoing process that is constantly evolving, and consequently requires a long-term, flexible strategy, with ongoing management.

How Stakeholders will Benefit

This project has been developed to respond to the needs of coastal community stakeholders, and to provide these communities with relevant information that will assist them in climate-change adaptation decision making processes. The WorldFish project consists of a team that has a broad range of skills, which enables us to evaluate the merits of different adaptation actions, taking economic, social and environmental issues into consideration.



(Continuation Box 11)

Learning Materials and Resources

This project aims to develop a number of learning materials and educational resources that can assist stakeholders in the decision-making process, including:

- User Manual – A manual outlining the methods that stakeholders can use to analyze and assess adaptation pathways.
- Knowledge Database – An online database of previous risk assessments and adaptation recommendations will be available, together with an evaluation of existing community adaptation tools/methods, to assess their effectiveness in preparing for climate change.
- Project Reports – Mid-term and final project reports will be submitted to ADB, together with a Policy Brief. These reports will communicate key findings to both funders and participating regional organizations and stakeholders.

Project Outcomes

These learning materials and resources will increase our knowledge of climate change vulnerability, and provide a valuable reference from which to develop a plan to respond to the impacts of climate change.

Regional stakeholders will benefit by gaining knowledge that will empower them with a greater capacity to adapt to climate change through effective planning, implementation, and monitoring of adaptation actions. This will enable them to devise long-term responses that will assist their communities to adequately cope with change. In addition, these communities will gain an enhanced capacity for integrating these actions on a broader scale within future planning and human development initiatives.

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BOX 12: HORIZONTAL EVALUATION: STIMULATING SOCIAL LEARNING AMONG PEERS

Horizontal evaluation is a flexible evaluation method that combines self-assessment and external review by peers. We have developed and applied this method for use within an Andean regional network that develops new methodologies for research and development (R&D). The involvement of peers neutralizes the lopsided power relations that prevail in traditional external evaluations, creating a more favourable atmosphere for learning and improvement.

The central element of a horizontal evaluation is a workshop that brings together a group of 'local participants' who are developing a new R&D methodology and a group of 'visitors' or 'peers' who are also interested in the methodology. The workshop combines presentations about the methodology with field visits, small group work and plenary discussions. It elicits and compares the perceptions of the two groups concerning the strengths and weaknesses of the methodology and provides practical suggestions for improvement, which may often be put to use immediately.

Evaluation by peers is what makes the process 'horizontal', compared with the 'vertical' evaluation typically provided by outsiders of perceived higher professional status. This method differs from the anonymous peer reviews used by professional journals and research funders, in that horizontal evaluation is open and transparent, with all the participants encouraged to learn and benefit from the evaluation process. Horizontal evaluation neutralizes the power dimension implicit in traditional evaluation, in which the 'expert' judge the 'inexpert' and the 'powerful' assess the 'powerless'. Because of this neutralization, a more favourable learning environment is created.

Most of those involved directly with Papa Andina have been specialists who work with potato R&D organizations. They come from broadly comparable social and professional backgrounds, with similar types of knowledge about potato R&D, and they see each other as peers. As stakeholders in Papa Andina they share an interest in the methodologies developed with support from the network. This gives them the motivation to participate, learn and contribute. Another motivation for active involvement is that some of those who serve as peer evaluators during one horizontal evaluation know that their own work may later be evaluated by other peers within the network.

Horizontal evaluation is a flexible method which can be applied in a range of settings to facilitate: the sharing of information, experiences and knowledge; the building of trust and a sense of community, which in turn fosters knowledge exchange; the social or interactive learning and corrective action needed to improve R&D methodologies; and the adaptation and wider use of these methodologies. We believe the approach can be applied in different types of projects and programmes, especially those that operate in a network mode.

Combining self-assessment with external review: The participatory workshop, typically last 3 days, involving local participants or internal group of 10–15 people and a similarly sized group of outsiders or visitors or peers.

(Continuation Box 12)

The role of the local participants is to present, and with help from the visitors, critically assess the methodology and make recommendations for its improvement. The role of the visitors is to critically assess the methodology, identifying its strengths and weaknesses and making suggestions that will aid its wider application. The visitors may contribute to the formulation of recommendations, but the local participants must take the lead and actually propose and agree them, since their ownership of the recommendations will be the key to implementation.

Planning the workshop: We work with our partners to identify an appropriate methodology to be evaluated, select participants and prepare for the event. An organizing committee should be established and should include decision makers from among both local participants and visitors. We have learned that it is very important that the topic of the evaluation should be clearly defined: it is the methodology that should be evaluated, not the project or organization that developed it. Defining and maintaining the scope of the evaluation is critical for its success.

Advantages and critical success factors

We have found that horizontal evaluation has the following advantages over traditional external evaluations and study tours:

- it is adaptable to different objects of evaluation (including fairly complex R&D methodologies);
- local participants accept critical feedback and observations more easily from peers than from external evaluators;
- it fosters social learning, as local participants and visitors are actively engaged throughout the review process, which guides analysis and synthesis and generates new knowledge and proposals for action;
- it stimulates experimentation with and further development of the methodology elsewhere;
- it can be used in conjunction with a more traditional external evaluation, to generate additional information and insights.

We have identified the following factors as critical for the success of a horizontal evaluation:

- selecting the right moment for the workshop – one when the new R&D methodology is sufficiently advanced so that there is real substance to review but not so finished that there is little scope for modification;
- careful selection of visitors to ensure that they have diverse perspectives, possess adequate knowledge and experience, and are perceived as peers rather than superiors;
- good facilitation, so as to create an environment of trust, focus the attention of participants and manage time efficiently;
- identifying a limited number of clearly defined evaluation criteria;
- well-prepared presentations and field visits that ensure the visitors have all the information they need to understand the methodology.

Conclusions

Horizontal evaluation has become a central element in our approach for developing R&D methodologies and sharing knowledge across the region in which we work. It is especially relevant for networks such as Papa Andina, that seek to bring together peers for social learning in ongoing processes. After each workshop we

(Continuation Box 12)

have reflected on and improved horizontal evaluation as a tool. We believe horizontal evaluation is now ready for use by others who are developing new R&D methodologies with partners in different locations and who are keen to learn from their experiences.

Further reading

Bernet, T., Devaux, A. , Ortiz, O. and Thiele, G. 2005. *Participatory Market Chain Approach*. *BeraterInnen News*, 1. Downloaded 26 December 2005 from the website of the Swiss Center for Agricultural Extension (LBL):http://www.lbl.ch/internat/services/publ/bn/2005/01/participatory_market...

Papa Andina. 2004. *Memoria Taller de Evaluación Horizontal: Articulando demanda y oferta tecnológica, la experiencia del proyecto Innova-Bolivia*. CIP, Lima, Peru: CIP.

Papa Andina. 2005. *Final Report – 3rd PMCA Workshop in Uganda, 13–15 December 2005*. Lima, Peru: CIP.

About the authors

The authors coordinate the Papa Andina network hosted by the International Potato Center (CIP), based in Lima, Peru, with support from the Swiss Agency for Development and Cooperation (SDC). For further information, contact g.thiele@cgiar.org.

Source: Graham Thiele, André Devaux, Claudio Velasco and Kurt Manrique; Chapter 18: *Horizontal Evaluation: Stimulating social learning among peers*
URL: <http://www.cgiar-ilac.org/content/chapter-18-horizontal-evaluation>



BOX 13: MASAGRO: USING REGIONAL HUBS TO STRENGTHEN WORKING PARTNERSHIP WITH NATIONAL PARTNERS

The Sustainable Modernization of Traditional Agriculture (MasAgro) project¹ supports Mexican farmers working in partnership with several organizations to improve agriculture in Mexico. The Mexican Government and the international scientific community are collaborating to increase maize and wheat productivity, obtain higher returns on the yields of these two basic and strategic crops, and make sure that increased productivity does not contribute to climate change. MasAgro will make it possible to uncover the genetic potential of the International Maize and Wheat Improvement Center (CIMMYT) maize and wheat collections. SeeD will provide the raw material for adapting seeds to adverse conditions resulting from global warming and from the shortages of water, nutrients and energy, both in Mexico and the rest of the world.

MasAgro brings together national and international organizations in partnership with innovative Mexican farmers to obtain higher and more stable crop yields. Following an initiative of Mexico's Ministry of Agriculture, Livestock, Rural Development, Fisheries, and Food (SAGARPA) and of the International Maize and Wheat Improvement Center (CIMMYT), the project targets small-scale farmers who lack access to modern agricultural technologies and functional markets. MasAgro aims to help them increase their income through a combination of improved cropping practices (including conservation and precision agriculture) and conventionally-bred, high-yielding maize and wheat varieties. This is to ensure that increased productivity does not have negative impacts that may contribute to climate change. CIMMYT conserves the world's largest collections of maize and wheat. The Center safeguards this legacy for human kind, ensuring its accessibility through tools that facilitate its free distribution, exchange and use, for the benefit of agriculture and global food security.

Cutting edge technologies are being employed to release the genetic potential of these collections and to facilitate the use of new genes and useful characteristics as "raw material" for genetic improvement. Work is undertaken in parallel with similar initiatives in the private sector. The aim is to ensure important genes are within the reach of public improvement programs throughout the world.

The MasAgro project² works in the major maize and wheat producing regions in Mexico. In total seven regions of similar ecological and agricultural production characteristics have been identified and innovation systems are being established in all regions (Figure 1). The networks will focus on conservation agricultural based crop management technologies as well as improved crop varieties, post-harvest technologies and integrated soil fertility management.

The MasAgro initiative has established a series of hubs. The idea of a hub is to provide a space where all actors of the value chain can meet, interact and link up to reduce information asymmetries and transaction costs as well as to create vibrant rural living spaces. The space serves also to establish strategic links between public and private institutions, be they research institutions or service providers. Thus, it disseminates knowledge about improved agricultural systems to small and medium sized farmers. CIMMYT, as the network broker for the MasAgro innovation network, facilitates the linkages of actors.

¹ Based on information extracted from the CIMMYT website

² Based on personal correspondence with Hellin, Jonathan (CIMMYT) j.hellin@CGIAR.ORG

(Continuation Box 13)

The basic structure of a hub includes the establishment of experimental platforms, farmer modules and extension areas (Figure 1). Experimental platforms are placed within universities, research institutes or are newly set up with interested collaborators like farmers, producer organizations or private industry. Research in the platforms locally adapts and improves the proposed technologies and solves problems arising from farmer trials that are specific to the local cropping systems. Additionally, the experimental platforms serve to train farmers, extension agents, researchers, and other collaborators to reach a better diffusion of the climate smart technologies and practices.

The modules are placed on fields of innovative farmers who are interested in working with key agricultural technologies. The farmers are linked to an extension agent who is trained by CIMMYT and by MasAgro's scientific partners and who is supported by the MasAgro infrastructure. Together, they experiment with the chosen technologies in the farmer's field to test and further adapt the technologies. This feedback is necessary for the research platforms and other network participants to adjust the research trials and solve potential problems. Surrounding farmers, public and private extension agents and service providers are invited to field day demonstrations.

Conservation Agriculture: Innovation for a significant change in Mexican soil

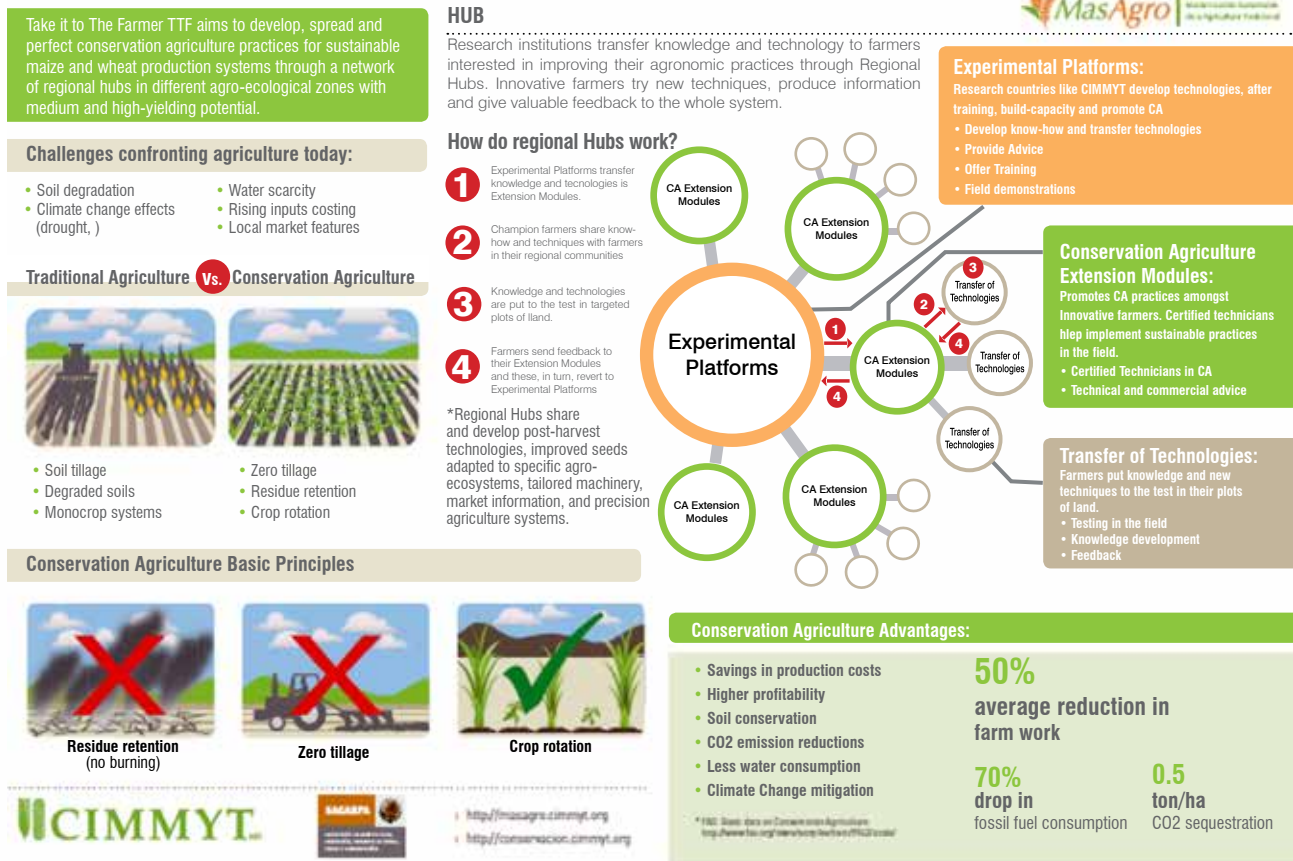


Figure 1.

BOX 14: FARMER FIELD SCHOOLS AND CIALS IN CIATS WORK

Farmer field schools (FFS) and local agricultural research committees (CIALs) constitute two platforms for promoting integrated decision-making and innovation for sustainable agriculture by farmers. Recently, there has been some convergence between the two platforms, but the main objectives underlying each differ.

The first platform is oriented towards providing agroecological education through participatory learning, whereas the second is intended to build a permanent local research service that links farmer experimentation with formal research. Outcomes common to both approaches include:

- increased farmers' capacity for research, innovation and informed decision-making (Ashby et al., 2000; Aizen, 1998; Settle et al., 1998; Nyambo et al., 1997; Schmidt et al., 1997; van de Fliert, 1993; Humphries et al., this issue);
- development of farmers' capacity to define their own research agendas in the CIALs and as part of the FFS follow-up activities (Ashby et al., 2000; Ooi, 1998; Braun, 1997; Settle, 1997; Humphries et al., this issue);
- stimulation of farmers to become facilitators of their own research and learning processes (Ashby et al., 2000; Settle et al., 1998; Braun, 1997; Humphries et al., this issue; Schmidt et al., 1997; Winarto, 1995);
- increased responsiveness to farmer-clients' demands and needs by organisations in national research, extension and development systems (Ashby et al., 2000; Settle et al., 1998; van de Fliert, 1993).

The FFS and CIAL approaches have been replicated both inside and outside the countries where they originated (Ashby et al., 2000; Settle et al., 1998). FFS began in Indonesia in 1986. By 1998, two million small farmers in key rice production areas of 12 Asian countries had learned through FFS how to become informed decision-makers with respect to crop management and protection (Settle et al., 1998). Untung (1996) estimates that the resulting reduction in pesticide use in Indonesia is around 50–60 per cent. FFS have already been established in several African countries and the first few Latin American FFS are operating in Ecuador, Peru and Bolivia. CIALs began in Colombia in 1990, and by 1999, 249 resource-poor communities in eight Latin American countries had active CIALs providing agricultural research services (Ashby et al., 2000).

In addition to stimulating local experimentation on varieties, crop and soil management, and improving access to formal research products, the CIALs have contributed to increased food security, higher yields, greater biodiversity in cropping systems, the launching of rural microenterprises, and to increasing social status of women and other marginalised groups (Ashby et al., 2000; Humphries et al., this issue). In Latin America both the FFS and CIAL platforms have begun to operate within the same geographic areas: in Ecuador and Bolivia both are supported by the same organisations.

Both the FFS and CIAL platforms described require and promote a much closer engagement of agricultural research and extension with rural society, building local institutional structures and processes for agricultural development. They also offer the chance of making R&D more relevant because they place farmers themselves at the centre of development processes. If widely implemented, FFS and CIALs open the possibility of a more fundamental transformation of agricultural R&D systems which could help alleviate the current crisis.

Developing the capacity to support platforms like FFS and CIALs implies that agricultural R&D systems must: (a) construct general theories of the structure and dynamics of specific agro-ecosystems required for the development of FFS curricula; and (b) involve farmers in the testing and adaptation of technological options; while (c) simultaneously building the human resources required for facilitating farmer research and discovery-based learning.

(Continuation Box 14)

Growing interest in both FFS and CIALs by a wide range of financing and implementing organisations reflects an underlying perception that they form viable new alternatives. Under these circumstances we believe that there is good potential for applying both FFS and CIALs more widely. Both platforms will evolve further, and we believe that their future development should be carefully managed so as to draw on their underlying synergy.

Citations within the above note have been removed in this shortened version. For full references please refer to the original article Farmer Field Schools and Local Agricultural Research Committees: Complementary Platforms for Integrated Decision-Making in Sustainable Agriculture. Ann R. Braun, Graham Thiele and María Fernández. AgREN Network Paper No. 105. July 2000.



BOX 15: SWEET POTATO FARMER FIELD SCHOOLS IN CIP

The Farmer Field School (FFS) approach originated in Indonesia in 1989, in response to a major pest outbreak, caused by the misuse of pesticides on rice farms. A national integrated pest management (IPM) program began, which attempted to improve the organisation and management skills of farmers, not by instructing them on what to do but by empowering them through education to make better use of their existing knowledge to handle their own on-farm decisions. This training program occurred in farmer's fields and combined farmer's traditional knowledge of land management with a more thorough understanding of the ecology of rice field ecosystems, it became known as the farmer field school program. The field was seen as the teacher and its conditions defined most of the curriculum. The plants formed the most important learning materials and real problems were observed and analysed from planting all the way through to consumption, processing and/or sale.

The educational philosophy of the FFS rests on the foundations of non-formal adult education, and reflects the four elements of the 'experiential learning cycle':

Operationally, FFSs are typically organised around a season-long series of weekly meetings focusing on biological, agronomic and management issues. Farmers conduct agro-ecosystem analyses, identify problems and then design, carry out and interpret field and post-harvest experiments. The experiential learning approach of FFS provides participating farmers with a deeper understanding of crop ecology and observational, analytic and problem solving skills, which helps them evaluate the importance and applicability of their existing and innovative practices.

In order to implement such integrated, knowledge-intensive and location-specific approaches, farmers require intensive training, so they can understand (as opposed to just participate in activities), why some methods are better than others. They also acquire skills to adapt techniques as necessary to their own specific conditions. These understandings and skills are usually transferable between field activities, and can be passed on through traditional knowledge pathways. The formation of cohesive farmer groups during these collective learning activities and their exposure to economic analysis often increases the negotiating power of these producers with traders or suppliers. It leads to an increased awareness of rights and establishment of farmer action networks.

The longer-term empowerment goals of FFS seek to enable graduates to continue and expand their knowledge, help others learn and organise activities within their communities to institutionalise integrated crop management practices. Every learner is a potential trainer and the facilitators must be technically strong.

The FFS approach complements existing research and extension activities through shortening the time it takes to get research results from stations to adoption on farmers' fields. This is done by involving farmers in experimentation of their own; enhancing the capacity of extension staff to serve as technically skilled and group sensitive facilitators of farmers' experimental learning; increasing the expertise of farmers to make logical decisions on what works best for them. The latter is based on their own observations of experimental plots in their FFS and establishment of coherent farmer groups that facilitate the work of extension and research workers, providing the demand for a demand driven system.

During the 1990s an estimated 2 million farmers were trained through the FFS in South and Southeast Asia. The FFS approach has since been replicated in a variety of settings beyond IPM. There has also been a shift from a focus on a single constraint of a single crop (IPM for rice based systems) to an emphasis on the multiple aspects of crop production and management, to cropping systems, to non crop/forest (livestock production etc) to natural resource management (soil fertility, water conservation etc) and even to socio-cultural dimensions of community life (food security & nutrition, savings, health, HIV/AIDS, literacy training, livelihoods etc). The FFS approach has been extended throughout Asia and to several countries in Africa and Latin America.



(Continuation Box 15)

In East Africa, this has required adaptation and modification of the approach to make it more applicable for the farming systems of the region, where a wide diversity of crops are grown and where pests are not necessarily the major production problems. The adoption of an extra 'P' in the IPM acronym to form Integrated Production and Pest Management (IPPM) FFS reflects this more holistic approach. The East African context also provided specific challenges, different from those in Asia, such as long distances between farming communities, limited national funding for public extension, and highly unpredictable weather patterns with frequent droughts.

Note: This article has been substantially shortened (repackage for purposes of demonstrating the potential value of the FFS as a social learning tool. For full information on the use of the FFS in Sweet Potato promotion please refer to the original article ***An Introduction to Sweetpotato Farmer Field Schools*** from CIP.

For information on more recent use of FFS in CIP refer to Working with Resource-Poor Farmers to Manage Plant Diseases by: Rebecca Nelson, Ricardo Orrego and Oscar Ortiz, Jose Tenorio, Christopher Mundt, Corvallis Marjon Fredrix, Ngo Vinh Vien. Plant Disease, Vol. 85 No. 7.



BOX 16: CAC: COLLECTIVE APPROACH TO NATURAL RESOURCES MANAGEMENT

The Scales project was designed to address the challenges of achieving and maintaining collective action at different scales in watersheds. High scale coordination and cooperation is essential to address watershed problems. However, the multiple, overlapping scales, and the ecological, economic, social and political asymmetries that typically characterize watersheds substantially make it difficult to achieve cooperation around watershed management at anything but very local scale. Over 600 residents of 4 Andean watersheds participated as “players” in “economic games”. Results confirmed that upstream downstream asymmetries reduce incentives for cooperation compared to the symmetric conditions that characterize many common property resource problems.

Upstream communities have an important role to play in initiating watershed dialogue because downstream people, both in the games and in reality, appear to have a deep distrust of upstream residents, limiting their willingness to cooperate. Action research involved the use of an innovative methodology the Conservatorio de Accion Ciudadana (CAC), for empowering communities to engage with authorities. This was adopted and validated in two sites in Colombia.

CAC is a politico-legal mechanism for achieving meaningful participation by civil society. It is based on the idea of civil society and authorities conversing in familiar terms about issues of importance to both, and arriving at agreements for action. The methodology consists of three phases: preparation, negotiation, and follow-up. It is designed to address the inequities in power and information between communities and government institutions that make it difficult for communities to exercise their constitutional rights to participate and to hold their representatives accountable.

CAC's point of entry is the Colombian constitution and the rights and responsibilities that citizens are entitled to but often do not know how to use. Training courses are conducted to teach individuals to use concrete legal instruments to obtain information or compel government agencies to promptly fulfill their obligations. This is accompanied by efforts to build social capital and increase people's knowledge of their natural resources. While the focus is on the community, training courses are also offered for public servants. This is because in reality many of them are also unaware of their roles and responsibilities under the constitution. This is especially true in relation to citizens' participation.

A three-pronged (environmental, social, and legal) capacity building or 'preparation' phase culminates in a one-day public meeting. In this meeting, communities invite representatives of the authorities whose mandates include the key social and environmental issues identified by the communities in the preparation phase. A structured negotiation takes place leading to signed agreement by representatives of institutions to undertake specific actions to improve social welfare and natural resource management. In the follow-up phase of the CAC, community representatives ensure that institutions comply with their commitments.

Varying ways of implementing CAC

While the CACs followed the same general methodology, each was implemented in a slightly different way due to differences in the lead organizations; the social, political and biophysical contexts; the available resources; and the level of support from organizations like ASDES and WWF.

The specific interventions that the CACs undertook to increase human capital included training sessions on legal rights and how to exercise them; hands-on analysis of environmental issues such as water quality, soil erosion or loss of biodiversity; workshops on identifying and analyzing problems and formulating solution; and, especially for those who were “questioners” in the CAC itself, coaching on how to formulate questions, arguments and counter-arguments, and how to speak in public.

Economic experiments were conducted both as a research activity to better understand the factors that support or inhibit collective action in watersheds, and as a development activity in which watershed residents participate as “players” in “games” or scenarios designed to reflect the actual incentives people face when deciding how to use resources that have both individual and social costs and benefits (Cardenas and Ostrom, 2004). The games made explicit the incentives for and against cooperation and generated discussion on how to address the constraints to collective action.

Outcomes and Impacts

External assessments showed that CACs had significant impact on human and social capital of participants, while also demonstrating that it is possible to level the playing field and empower communities to engage with authorities around issues of resource management. Communication rather than regulation is the most effective way for people to improve level of cooperation. One of the recommendations is that projects that seek to strengthen the role of the poor in watershed management need to be aware of the multiple and overlapping scales at which resource management decisions are made.

Impacts on poverty and the environment are not addressed since these are of a long-term nature. However, implications for these kinds of impacts can be inferred from the shorter-term impacts that are presented.

- *The CAC methodology, as implemented in three Colombian watersheds between 2005 and 2007, led to 76 concrete commitments on the part of institutions to improve the welfare of watershed residents and the management of watershed resources.*
- *An assessment in late 2007 showed that compliance rates were relatively high, especially in the communities that had stronger follow-up processes.*
- *The CAC methodology also had significant human and social capital impacts on community members who participated, and led to changes in the ways that communities and institutions perceive each other, in some cases, moving from antagonism to respectful collaboration.*
- *While estimating an economic rate of return is beyond the scope of this assessment, the impacts appear to be large relative to the size of the investment made in carrying out the CACs, indicating a high rate of return.*

(Continuation Box 16)

Lessons Learned

- The main lesson from this experience is that a CAC takes time. The SCALES project initially estimated that the preparation phase would take 3-6 months.
- Partnership with a committed local organization. Perhaps the most critical determinant of success is the presence of a committed local organization with experience in community organization
- Experience has its influence. SCALES project partners had experience in Fuquene and Coello prior to the initiation of the SCALES project
- Link early with the public institutions to be invited to the CAC. Involving them in the process leads to more meaningful participation in the negotiation phase.
- Importance of community involvement. The impacts of the CAC will be larger and will likely be more widely distributed if more community members can be involved.

Contact persons: C. Candelo, L. Cantillo, J. Gonzales, A.M. Roldan, N. Johnson

Partner Organizations

International Center for Tropical Agriculture (CIAT); Consorcio para el Desarrollo Sostenible de la Ecoregion Andina (CONDESAN); Fundación Humedales; International Food Policy Research Institute (IFPRI); Semillas de Agua, Universidad de los Andes; World Agroforestry Center (ICRAF); World Wildlife Fund - Colombia

Key Reference

1) PN. 20 – Sustaining inclusive collection action that links across economic and ecological scales in upper watersheds (SCALES). Volume II. 2nd International Forum on Water and Food, 2008

2) Johnson N, Sustaining Inclusive Collective Action that links across economic and ecological scales in upper watersheds (SCALES) Project number 20 The Challenge Program on Water and Food August 15, 2009.



Appendix 5: A Partial, Illustrative Listing of Social Learning Related Efforts in the CGIAR

1. International Rice Research Institute(IRRI)

PROJECT TITLE:
Participatory farmer video production , project under Global Rice Science Partnership (GRISP) program
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Rice Research Institute’s Irrigated Rice Research Consortium (IRRC), Assessment Institute for Agricultural Technology (AIAT) of Southeast Sulawesi, Digital Green, an organization based in India
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Short learning videos that capture new or improved agricultural technologies and practices are created by farmers, for farmers. These videos, available on the Digital Green Web site, are shared among similar communities through facilitated discussion. • Uses Digital Green approach which aims to raise the livelihoods of smallholder farmers through targeted production and dissemination of agricultural information via participatory video and mediated instruction. The farmers are in control of the entire production. They highlight benefits and pros and cons in their own way, using their own experience and their own particular settings.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Ms. Trina Leah Mendoza, Senior Communication Specialist, Irrigated Rice Research Consortium (IRRC), CESD. Email: t.mendoza@irri.org • http://irri.org/index.php?option=com_k2&view=item&id=12346:farmers-got-talent&lang=en

2. PROJECT TITLE:
On-farm participatory varietal selection (PVS) , activity under Climate Change Affecting Land Use in the Mekong Delta: Adaptation of Rice-based Cropping Systems (CLUES)

IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI CLUES project, Cuu Long Delta Rice Research Institute (CLRRI)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • An on-farm participatory varietal selection (PVS) of stress-tolerant varieties (both submergence and salinity) was held in Bac Lieu Province, South Vietnam to test adaptability in the locality and acceptability by the farmers. An approach used to evaluate was preference analysis, where farmers were allowed to set criteria and select the varieties they most want to grow.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Nguyen Thi Lang of Cuu Long Delta Rice Research Institute (CLRRI) E-mail: ntlang@hcm.vnn.vn • http://irri.org/index.php?option=com_k2&view=item&id=11727:vietnam-farmers-in-bac-lieu-province-join-varietal-selection-of-submergence-and-salt-tolerant-rice&Itemid=100242&lang=en

3. PROJECT TITLE:
Farmers Field Day to evaluate salt-tolerant rice varieties
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • Cereal Systems Initiative for South Asia (CSISA), Bangladesh Rice Research Institute, Bangladesh Institute of Nuclear Agriculture, Directorate of Agriculture Extension (DAE) at Katianangla Village.
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • 143 participants from the villages of Gnnngarampur, local government representatives, and staff members of the Cereal Systems Initiative for South Asia (CSISA)-Khulna Hub attended a field day for participatory evaluation by farmers of salt-tolerant aman rice varieties at Khulna District (Bangladesh) on 24 November 2011. Participants cast their votes for the best and the worst varieties according to their own preference.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • http://irri.org/index.php?option=com_k2&view=item&id=11514:bangladesh-farmers-evaluate-salt-tolerant-rice-varieties&Itemid=100242&lang=en

4. PROJECT TITLE:
Multistakeholder Partnership (MSP) Platform for rice in Agusan del Norte, Philippines , project under Philippine Rice Self-Sufficiency Project (PRSSP)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI, PhilRice
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The MSP aims for sustained dissemination to and widespread adoption of rice technologies by farmers by embracing a public-private partnership model that brings together various government and non-government organizations in the region representing the different sectors of the rice value chain.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • FlorPalis, IRRI's Social Sciences Division, (f.palis@cgiar.org) • Irene Tanzo, Socioeconomic Division of PhilRice http://irri.org/index.php?option=com_k2&view=item&id=11431:philippin-es-irri-philrice-to-organize-multistakeholder-partnership-for-rice-in-agusan-del-norte&Itemid=100242&lang=en

5. PROJECT TITLE:
Farmers' Field day on stress-tolerant rice varieties , activity under the STRASA project
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI, , National Rice Research Programme, the Nepal Agricultural Research Council (NARC)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The activity was attended by more than 100 farmers from Hardinath, Nepal; representatives from government organizations; and Forward, an NGO of Dhanusha District, Nepal. The field day provided farmers and scientists to interact at a gathering in NRRP after the field visits. A joint seed production program among FORWARD, NRRP-Hardinath, and the Agriculture Development Office of Dhanusha District was also launched to make seeds of the drought- and submergence-tolerant varieties available locally for the current rice-growing season.

CONTACT INFORMATION:
<ul style="list-style-type: none"> • BhabaTripathi, senior associate scientist at IRRI-Nepal, (bhaba.tripathi@gmail.org)+0097- 1-4218823 (office); +9851097394 (mobile) http://irri.org/index.php?option=com_k2&view=item&id=11365:nepal-farmers%E2%80%99-field-day-puts-spotlight-on-stress-tolerant-rice-varieties&Itemid=100242&lang=en

6. PROJECT TITLE:
Farmers' field days focused on rice-maize systems, activity under the Sustainable intensification of rice-maize (R-M) systems in Bangladesh project.
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI, International Maize and Wheat Improvement Center (CIMMYT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Three farmers field days conducted in 2011 at 3 project sites in Bangladesh. More than 100 farmers, government extension personnel, researchers, project staff, and visited sites that feature farmers' participatory conservation agriculture (CA)-based unpuddled transplanted rice (UPTR), zero-tillage direct-seeded rice (DSR) trials, and Nutrient Manager (NM) for rice trials. Activities on CA practices and site-specific nutrient management (SSNM) for rice and maize in rice-maize (R-M) systems
CONTACT INFORMATION:
<ul style="list-style-type: none"> • JagadishTimsina, IRRI senior cropping systems agronomist, (j.timsina@cgiar.org) +88029898011; 8801730334660, IRRI Bangladesh country office • Mahesh K. Gathala, cropping systems agronomist at CIMMYT http://irri.org/index.php?option=com_k2&view=item&id=11364:banglades-h-farmers-field-day-focuses-on-rice-maize-systems&Itemid=100242&lang=en

7. PROJECT TITLE:
Increasing technology adoption in Latin America and the Caribbean
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI, Latin American Fund for Irrigated Rice (FLAR), International Center for Agriculture in the Tropics (CIAT)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • IRRI works towards farmer-to-farmer exchange in incorporating new production strategies. It highlights farmer participation in designing and running these programs. Having had successful projects in improved crop management in the region, CIAT, through the FLAR initiative, is an important partner in diagnosing key management factors for improvement, identifying innovative farmers to conduct initial validation plots, establishing farmers' groups around these farmer-leaders, and conducting intensive training of farmers and technicians.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • http://www.flar.org/ http://www.flar.org/index.php/en/-about-flar/-teamwork

8. PROJECT TITLE:
<p>The Irrigated Rice Research Consortium (IRRC), a platform and mechanism for partnerships between national agricultural research and extension systems (NARES) and IRRI</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • One major line of work is Country Outreach Programs, wherein IRRC staff members work closely with in-country partners to exchange information on technological developments, experimentally validate technologies, facilitate information exchange between research and extension, and integrate crop management principles and technologies. • Scaling out the principles and technologies is done by providing logistical support to in-country 'champions', providing technical advice, assisting with developing support materials for local extension experts, and conducting collaborative sociological studies on the factors that influence adoption by farmers. • This project was recently terminated and will start again in 2013 under a new name CORIGAP to be funded by SDC.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Dr. Grant R. Singleton, Coordinator for the Irrigated Rice Research Consortium, (g.singleton@cgiar.org); F.Palis@irri.org; M.Casimero@irri.org; Ms. Trina Leah Mendoza, IRRC Coordination Unit, (t.mendoza@cgiar.org); Thelma Paris, Senior scientist and gender specialist (t.paris@irri.org)

9. PROJECT TITLE:
Community-based seed systems (CBSS) or Community Seed Bank , an initiative under the Consortium for Unfavorable Rice Environments (CURE)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Rice Research Institute (IRRI), University of Southern Mindanao (USM), Philippine Rice Research Institute, Department of Agriculture
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The CSB comprises a group of well trained and committed farmers who process seeds from a range of individuals or groups who share seeds among themselves. These groups 'learn-by-doing' the best management options to ensure seed purity and quality of seeds they produced on-farm. The CSB, as a modality for technology delivery, provides management practices on seed health, crop diversification; introduction of improved and tolerant varieties, opportunities for market integration, and in situ conservation of traditional varieties for active use. Presence of local champions, the strong support from the local executives and NGOs for technical assistance, farmer-volunteers, capacity building, and community empowerment are some of the success factors that were identified.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Dr. Rosa Fe Hondrade, social scientist at the University of Southern Mindanao (USM), (rfhondrade@yahoo.com.ph) Link: http://irri.org/index.php?option=com_k2&view=item&id=159&lang=en

10. PROJECT TITLE:
The farmer field school (FFS) approach to introduce rice farming and new rice production technologies to ex-combatant women in the Republic of Burundi
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI, CARE Burundi, Survivor corps, Council on Integrated Development Burundi (CONSEDI), Center for the Training and Development of Former Combatants, and the University of Burundi

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Ex-combatant women were organized into groups and each group is provided land to grow rice on. The project supplied the necessary start-up finance for renting land, seed, and fertilizer while the women provided the labor. Using the farmer field school (FFS) approach, the women groups were provided advice and assistance from land preparation through to harvesting. Participatory variety selection (PVS) trials and other on farm trials in each group's fields for collaborative research purposes were also conducted.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Joseph Rickman, regional coordinator for the East and Southern Africa (ESA), IRRI Africa Program, (j.rickman@cgiar.org); +258823027073 IRRI Africa country office (Maputo, Mozambique)

11. PROJECT TITLE:
Nutrient Manager for Rice (NMRiceMobile)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI, Department of Agriculture (DA) in the Philippines
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • NMRiceMobile is designed to help farmers increase their production and profit by allowing them to receive advice via their mobile phone on applying the right type of fertilizer in the right amount and at the optimum time, thereby reducing fertilizer waste. It incorporates the principles of site-specific nutrient management (SSNM) for rice already well established in Asia's major rice-growing areas. SSNM is available through an online decision-making tool called Nutrient Manager for Rice, which is tailored to the particular rice-growing conditions of a country. It enables extension workers, crop advisors, and farmers to rapidly determine the best fertilizer management practice for specific areas. Online applications of Nutrient Manager for Rice are now available for the Philippines, Indonesia, and Guangdong Province of China.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Roland Buresh, lead developer of NMRiceMobile, (r.buresh@cgiar.org)

12. PROJECT TITLE:
Seed Producers' Groups in Nepal, under the Consortium for Unfavorable Rice Environments (CURE)
IMPLEMENTING ORGANIZATIONS:
•• IRRI
PROJECT DESCRIPTION:
•• Seed producers' groups in seven villages in Lamjung, Tanahun, and Gorkha districts were formed in 2012. Since then, the production of lowland rice seeds doubled and upland rice seeds more than tripled. The groups have also been a means for CURE to introduce new varieties to the communities through participatory varietal selection approaches. The groups were instrumental to improved seed exchanges and information sharing among farmers as well as the increase in women's participation in farming.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• David Johnson, IRRI scientist and coordinator of CURE, (d.johnson@cgiar.org); +63 2 580 5600 (ext. 2771)IRRI headquarters •• Dr. Digna Manzanilla, social scientist at IRRI, (d.manzanilla@cgiar.org); +63 2 580 5600 (ext. 2620) IRRI headquarters http://irri.org/index.php?option=com_k2&view=itemlist&layout=category&task=category&id=777&Itemid=100066&lang=en

13. PROJECT TITLE:
Multistakeholder learning alliances for “collaborative entrepreneurship” strategy
IMPLEMENTING ORGANIZATIONS:
•• IRRI
PROJECT DESCRIPTION:
•• Strategy to improve the uptake of postharvest technologies through alliances that examine a range of technical, end-user learning, and market support needs in postharvest systems. Characterized by participatory 'learning-by-doing' approach that allows all stakeholders to identify particular sources of postharvest losses and a range of mitigating technology options for piloting and verification; as well as allow the realization of working together to support the adoption of new technologies. IRRI has established national learning alliances in Cambodia, Vietnam, and the Philippines.

CONTACT INFORMATION:
<ul style="list-style-type: none"> • Dr. Alfred Schmidley, IRRI business model and value chain specialist, (aschmidley@cgiar.org); +63 2 580 5600 (ext. 2754)

14. PROJECT TITLE:
Learning Alliance (LA) Writeshop , activity under IRRI Postharvest Project
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • 15 participants were guided in developing a business case write-ups of data collected from participatory trials of IRRI Superbags as well as business plan for adopting improved storage and drying technologies. The farmers were assisted in using tools that quantify financial benefits to their own enterprise to aid their decisions on whether to adopt technologies.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Ms. Trina Leah Mendoza, Senior Communication Specialist, Irrigated Rice Research Consortium (IRRC), CESD. Email: t.mendoza@irri.org • http://irri.org/index.php?option=com_k2&view=item&id=12046:philip-pines-postharvest-learning-alliance-holds-business-plan-writeshop-for-farmers&Itemid=100242&lang=en

15. PROJECT TITLE:
CURE (Consortium for Unfavorable Rice Environments) Approach amidst Rice Crisis and Changing Climate
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • CURE is a platform within which national agricultural research and extension systems (NARES) and IRRI researchers can partner together with farmers and extension workers to tackle key problems in sites representative of the diverse ecosystems. Its strategy involves on-site farmer-participatory research linking scientists from NARES, international research centers, and advanced research institutions using a multidisciplinary approach for technology generation, validation, and dissemination. It employs rice varietal diversity through field days by allowing exchanges of rice varieties among farmers to give them options of what to plant and what works best in their area. Also employs participatory evaluations in researcher-managed 'mother trials' and farmer-managed 'baby trials' that allows farmers to select rice varieties that match their performance criteria.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Dr. Gelia T. Castillo, c/o International Rice Research Institute, DAPO Box 7777 Metro Manila, Philippines Fax: +63 2 892 0354, Email: m.lago@cgiar.org; D.Johnson@irri.org; D.Manzanilla@irri.org; Thelma Paris, Senior scientist and gender specialist, IRRI (t.paris@irri.org) Link : http://www.irri.org/index.php?option=com_k2&view=item&layout=item&id=10361&Itemid=100575&lang=en

16. PROJECT TITLE:
Innovation Tree
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • IRRI
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • A participatory rural appraisal tool to help people visualize and analyze the way in which an innovation is spread over time between community members. It distinguishes innovators, and early and late adopters. It is also a way of helping both outsiders and the community to understand some of the social and psychological dimensions that influence the adoption and diffusion of an innovation within that community. The innovation tree investigates how different personalities or types of innovators play a different role in promoting the technology.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Paul van Mele, Former Learning and Innovation Systems Specialist, WARDA, Director, AgroInsight (paul@agroinsight.com) ; Noel Magor, Head of Training Center, IRRI (n.magor@irri.org) Link: http://www.agroinsight.com/downloads/Articles-Agricultural-Extension/36-PLA%20-%20Innovation%20tree%20-%20Van%20Mele%20and%20Zakaria%202002.pdf

17. PROJECT TITLE:
Enabling poor rice farmers to improve livelihoods and overcome poverty in South and Southeast Asia through the Consortium for Unfavourable Rice Environments (CURE)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• IRRI, NARES of 10 SA and SEA countries (Nepal, Bangladesh, India, Cambodia, Lao PDR, Indonesia, Phillipines, Thailand, Vietnam and Myanmar, funded by IFAD)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Validation, testing of new tolerant rice varieties and appropriate management options; Technical innovation services/outscaling and upscaling technological innovations; Capacity enhancement and knowledge management.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: David E. Johnson, coordinator (d.johnson@irri.org); Digna O. Manzanilla, Associate CURE coordinator (d.manzanilla@irri.org); Abdelbagi Ismail; Casiana Vera Cruz; Stephan Haefele; Glen Gregorio Link:

2. **International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**

18. PROJECT TITLE:
Farmer participatory variety selection (PVS) as part of Enhancing Groundnut Productivity and Production
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Farmer participatory variety selection (PVS) of 39 improved groundnut varieties resulted in the selection of 17 varieties having traits preferred by farmers and the market. Of these, 13 have been released and 23 are in the pre-released stage. Intensification of scaling up and out of PVS in other locations in Mali, Niger and Nigeria in 2008 is ongoing.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Email: icrisat-w-mali@cgiar.org • Website: www.icrisat.org

19. PROJECT TITLE:
Technology dissemination methods in West and Central Africa Semi-Arid Tropics
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • In general these methods comprise means to broaden the knowledge and the skills of target groups as well as to learn about potential structures and strategies of dissemination. Among the most important methods are: participatory variety selection, community-based seed systems, Integrated Soil Fertility (ISF) at Farmer Field Schools, and the Farmers for the Future program.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Email: icrisatsc@cgiar.org • Website: www.icrisat.org

20. PROJECT TITLE:
Farmers for the Future program in the West and Central Africa
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • A new generation of market-oriented farmers who are open to innovation and aware of the environment is developed in Niamey, Niger. Young students are provided with a wide range of production systems and also taught how to generate income, process and market their products, save, and invest. They put ICRISAT's agricultural technologies into practice by taking part in competitions and winning awards for excellence.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • http://www.icrisat.cgiar.org/icrisat-contact-wca.htm • http://www.icrisat.cgiar.org/icrisat-tools-wca.htm

21. PROJECT TITLE:
Farmers' Participatory Evaluation of Pongamia Seed Cake as a Plant Nutrient Source in Integrated Nutrient Management
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Through a project on "Strengthening Capacity for Participatory Research and Development Project for South Asia" organized by CIP-UPWARD and funded by IDRC, the principles and learnings of PR&D are applied at ICRISAT by assessing the value of Pongamia oil seed cake as a source of organic plant nutrients through women's Self-Help Groups and farmers. This PR&D project is linked with the USAID Project on "Developing Community-based Water-Energy Services and Markets: A Pilot Project".
CONTACT INFORMATION:
<ul style="list-style-type: none"> • t.k.sreedevi@cgiar.org

22. PROJECT TITLE:
Community-based integrated watershed management consortium
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • ICRISAT, Government of India (Central Research Institute for Dryland Agriculture, part of the Indian Council for Agricultural Research [ICAR], Government of Andhra Pradesh, and the National Remote Sensing Centre) civil society organizations and private companies

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • • A model for partnership in community-based watershed management was developed by establishing consortia that bring together institutions from public sector research, civil society and farming communities to share their knowledge in an equitable and efficient manner, and implement multidisciplinary activities at a landscape level. The consortium works with ICRISAT and watershed communities to manage soil and water resources and establish livelihood enterprises at the village level.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • http://www.icrisat.cgiar.org/icrisat-contact-wca.htm • http://www.icrisat.org/icrisat-jewels.htm

23. PROJECT TITLE:
<p align="center">Farmer-participatory improvement of sorghum and pearl millet genetic resources for increased adaptation to diverse production environments in West Africa</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • ICRISAT and INRAN
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • This project is designed to develop in a farmer-participatory manner pearl millet [Pennisetum glaucum (L.) R. Br.] and sorghum [Sorghum bicolor (L.) Moench] populations or cultivars with specific adaptation to different production environments in Niger, Mali and Burkina Faso. It consists of two sub-projects dealing with specific targets: (1) Dynamic genepool management and farmer-participatory recurrent population improvement of sorghum and pearl millet; and (2) development of improved sorghum cultivars with high phosphorus (P) efficiency and adaptation to low soil fertility using innovative screening, hereafter abbreviated as “P efficiency in sorghum.”
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Bettina I.G. Haussmann (ICRISAT), (b.ig.haussmann@cgiar.org) • Soumana Souley (INRAN) http://mcknight.ccrp.cornell.edu/program_docs/project_documents/WAF/WAF_06-014/06-014_sorghum_yr2_07-08_vweb.pdf

24. PROJECT TITLE:
Mapping the social network architecture of rural communities
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Research to understand and design ways that can harness the full potential of social networks. The study is designed in such a way to include participatory and interdisciplinary research. These include: Qualitative methods of data collection. Focus groups meeting with men and women farmers in the two study locations (Aurepalle and Kanzara) were conducted to understand the important transactions that people have in these two villages. The qualitative surveys were also aimed to understand the villagers' perceptions about Technological, policy-related changes and development programs in the village over the past two or three decades.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• http://www.icarus.info/wp-content/uploads/2011/619-RPadmaja-ICARUS2-Socialnetworks.pdf

25. PROJECT TITLE:
The Support to Able-bodied Vulnerable Groups to Achieve Food Security Project (SAFE)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• CARE and ICRISAT-Malawi
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The SAFE project aims to enhance food security through groundnut production by improving crop productivity, diversifying income regimes, and strengthening local institutions. The project used a farmer field school approach in where each school had between 20 and 30 members, who were mostly women since groundnuts are usually the responsibility of women. The project is slowly encouraging farmers to switch production from tobacco to groundnut.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Harvey Charlie, Senior Scientific Officer at ICRISAT

26. PROJECT TITLE:
Rehabilitation of Degraded Land in India through community-based initiatives
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and Central Research Institute for Dryland Agriculture (CRIDA)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Employs Participatory Approach to Rehabilitate Common Property Resources by developing biodiesel plantations through 1.) Consortium approach among Govt. line departments, NGOs, CBOs, and ICRISAT; and 2.) Collective Action.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• TK Sreedevi and SP Wani of ICRISAT M Osman of CRIDA
27. PROJECT TITLE:
Participatory research in the selection and evaluation of improved groundnut varieties in Mali
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• ICRISAT
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• New groundnut varieties are empowering women farmers in Mali after a 3-year long participatory research in the selection and evaluation of improved groundnut varieties has yielded positive results. Women groundnut farmers in the village of Wakoro have selected the varieties ICGV86124, Fleur 11 and JL 24, which produce high-quality seed. The women are organized into a groundnut farmers' association and have taken up groundnut growing as a business.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• BR Ntare, Plant Breeder ICRISAT Bamako, Mali, (b.ntare@cgiar.org)

28. PROJECT TITLE:
Farmer Participatory Variety selection and dissemination activities in Mali, Niger, Nigeria and Senegal
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • ICRISAT with Common Fund for Commodities, Food and Agriculture Organization of the United Nations, Institut d'Economie Rurale, Institut National de Recherches Agronomiques du Niger, Institut Sénégalais de Recherches Agricoles, and Institute for Agricultural Research
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Thirty-nine (39) new varieties were tested by farmers under their management and resources across Mali, Niger, Nigeria and Senegal under the CFC funded Groundnut Seed Project the four countries. Out of the varieties tested, 17 were selected based on the farmers' village level criteria which included high pod and fodder yield, resistance to diseases, taste, oil content, drought tolerance and marketability. More than 30 farmers' associations and small scale seed producers emerged and are producing and distributing seed of selected varieties in the pilot areas. Participation of farmers in variety selection is major determinant of variety adoption.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • BR Ntare, Plant Breeder ICRISAT Bamako, Mali • J Ndjeunga, Socio-Economist ICRISAT-Niamey, Niamey, Niger • F Waliyar, Plant Pathologist, ICRISAT-Patancheru, Andhra Pradesh 502 324 India • O Kodio, Head Groundnut Program IER CRRA, Kayes, Mali • C A Echekwu, Groundnut Breeder, IAR Samaru Zaria, Nigeria • I Kapran, Sorghum Breeder, INRAN

30. PROJECT TITLE:
Reviving Chickpea through Integrated Pest Management in Nepal
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) with Nepal Agricultural Research Council, Natural Resources Institute in Chatham Maritime, UK
PROJECT DESCRIPTION:

<ul style="list-style-type: none"> • Farmers' participatory on-farm research and promotion was conducted in collaboration between the Nepal Agricultural Research Council(NARC), Non-Government Organizations (NGOs), Farmers' Self Help Groups(FSHGs), International Agricultural Research Centers (IARCs), advanced research institutes and ICRISAT. To begin with, the concept and components of IPM of chickpea were discussed with farmers in several villages and several IPM orientation camps and schools were conducted during the crop season.
<p>CONTACT INFORMATION:</p>
<ul style="list-style-type: none"> • Dr Suresh Pande, Principal Scientist (Pathology), Regional ThemeCoordinator, Crop, Livestock and Systems Diversification, ICRISAT. Email: s.pande@cgiar.org

<p>31. PROJECT TITLE:</p>
<p>Improving Rural Livelihoods and Minimizing Land Degradation through the Community Watershed Approach for Sustainable Development of Dryland Areas</p>
<p>IMPLEMENTING ORGANIZATIONS:</p>
<ul style="list-style-type: none"> • International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) with Sir Dorabji Tata Trust (SDTT)
<p>PROJECT DESCRIPTION:</p>
<ul style="list-style-type: none"> • Through networking of partners by way of a consortium approach, the project has demonstrated that 50% of chemical fertilizers can be substituted with the locally-produced vermicompost that the farmers themselves make. In Madhya Pradesh 800 trials were conducted, and a 1000 in Rajasthan, during the post-rainy season, which demonstrated the productivity benefits that can be achieved by following the science-led farmer participatory approach. Scaling-out the benefits of productivity enhancement and community watershed management is done with technical backstopping in the target agro-eco-regions of Madhya Pradesh (9 districts) and Rajasthan (7 districts) along with carrying out capacity-building of lead farmers, development workers, and consortium partners.
<p>CONTACT INFORMATION:</p>
<ul style="list-style-type: none"> • Patancheru 502 324, Andhra Pradesh, INDIA

32. PROJECT TITLE:
Innovation Platforms
IMPLEMENTING ORGANIZATIONS:
•• ICRISAT
PROJECT DESCRIPTION:
•• It facilitates dialogue between the main local players in the value chain: farmers, input suppliers, traders, transporters, processors, wholesalers, retailers, regulators, and the research and development fraternity.
CONTACT INFORMATION:
•• Andre van Rooyen, Senior Scientist, ICRISAT (a.vanrooyen@cgiar.org Reference: http://www.icrisat.org/locations/esa/esa-publications/Innovation-platform.pdf

3. Center for International Forestry Research (CIFOR)

PROJECT TITLE:
Task Force on Traditional Forest Knowledge
IMPLEMENTING ORGANIZATIONS:
•International Union of Forest Research Organizations(IUFRO)
PROJECT DESCRIPTION:
•• Primary aim of the Task Force is to increase understanding of the inter-relationships between traditional and formal (scientific) forest-related knowledge and catalyze potential synergistic application(s) to sustainable forest management. Among its many tasks is to develop and facilitate a protocol for the exchange of information between traditional and western scientific forest knowledge in forest management. It is developing larger regional networks of contributing members representing the forest science community as well as individuals and organizations that represent and/or promote the interests of holders and users of traditional forest-related knowledge.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• John Parrotta of USDA Forest Service, Washington DC, USA Task Force Coordinator, Email: jparrotta@fs.fed.us Manuel Guariguata, CIFOR, Bogor, INDONESIA Email: m.guariguata@cgiar.org http://www.iufro.org/science/task-forces/traditional-forest-knowledge/about/

34. PROJECT TITLE:
Building collaboration through Action Research: the case of Ottotomo Forest Reserve in Cameroon
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Forest and Governance Programme, Center for International Forestry Research (CIFOR, Central and West Africa Regional Office)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• A research that uses a series of Participatory Action Research (PAR) tools to identify specific management problems, attempts to analyse those problems and establishes collaborative arrangements for future management inputs into the Ottotomo Forest Reserve in the Central Province of Cameroon, one of the protected areas in the country where several management strategies have been tested with varying degrees of success (e.g., the Tropical Shelterwood System (TSS) silvicultural technique was piloted in this forest more than 30 years ago).
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• C. JUM and P.R. OYONO, PO Box 2008, Yaounde, Cameroon Email: c.jum@cgiar.org

35. PROJECT TITLE:
Participatory monitoring in tropical forest management: a review of tools, concepts and lessons
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • A resource book that includes concepts and terms in participatory monitoring; synthesis of the lessons learned, organized along two broad themes: planning and implementing participatory monitoring and the main impacts of participatory monitoring; and a table of publications organized by theme: forest management for various objectives, biodiversity conservation and wildlife management, human wellbeing, political processes and institutions, non-timber forest products and ecosystem services. It provides a quick reference guide to specific aspects of participatory monitoring, such as tools, methods and monitoring topics.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Kristen Evans and Manuel R .Guariguata

36. PROJECT TITLE:
<p align="center">‘If you saw it with my eyes’: collaborative research and assistance with Central American forest steward communities</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • Center for International Forestry Research (CIFOR)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • A new conservation actor, the forest steward community, is emerging in Central America as an effective collaborator in forest conservation. An innovative participatory research in Guatemala and Nicaragua was conducted aiming to strengthen community capabilities in natural resource management. A Grassroots Assistance Project trained community members to document and critically reflect upon local experience with forest management and external assistance. Together with regional context studies undertaken by professional researchers, these local ‘autosystematization’ studies made possible comprehensive documentation of the multiple dimensions of communities’ resource management, identification of their strengths and vulnerabilities and discussion of future strategies.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Peter Leigh Taylor, Peter Cronkleton, Deborah Barry, Samantha Stone-Jovicich, Marianne Schmink. E-mail: cifor@cgiar.org Web site: http://www.cifor.cgiar.org

37. PROJECT TITLE:
Adaptive Collaborative Management (ACM)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• ACM is a participatory approach that links forest stakeholders, empowers local communities and their subgroups, and strengthens adaptive capacities. It is a value-adding approach whereby people who have interests in a forest agree to act together to plan, observe and learn from the implementation of their plans while recognizing that plans often fail to achieve their stated objectives. ACM is characterized by conscious efforts among such groups to communicate, collaborate, negotiate, and seek out opportunities to learn collectively about the impacts of their actions.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Peter Cronkleton, Senior Scientist, CIFOR (p.cronkleton@cgiar.org); Carol J. Pierce Colfer, Senior Associate/ Visiting Fellow, CIFOR/Cornell, (c.colfer@cgiar.org) Link: http://www.cifor.org/publications/pdf_files/Infobrief/013-infobrief.pdf E-mail: cifor@cgiar.org Website: www.cifor.org http://www.cifor.org/acm/ <p>File: Facilitating forests of learning: Enabling an adaptive collaborative approach in community forest user groups: A guidebook, (BMcDougall0901)</p>

38. PROJECT TITLE:
Guide to Participatory Tools
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research (CIFOR) with Swiss Agency for Development Cooperation (SDC)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• A guidebook that resulted from the research project, “Stakeholders and Biodiversity in the Forest at the Local Level,” second of two initiatives between SDC and CIFOR that have worked to improve people’s livelihoods and contribute to sustainable forest through action research. The contents of the Guide to Participatory Tools, however, are the result of many years of adapting, developing and testing participatory tools by CIFOR researchers and collaborators.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Kristen Evans, et al. E-mail: cifor@cgiar.org <li style="padding-left: 20px;">Website: <li style="padding-left: 20px;">www.cifor.cgiar.org File:

39. PROJECT TITLE:
Landscape Mosaics , a five country research project (Cameroon, Indonesia, Laos, Madagascar and Tanzania)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research (CIFOR)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The Landscape Mosaics project intended participatory action research (PAR) as one of two central approaches in the original research design (the other approach being more conventional research). However there was failure to implement PAR in the 5 sites as described and analyzed in the book entitled ‘Participatory action research for catalyzing adaptive management Analysis of a “Fits and Starts” process.’ The paper argues that contextual constraints can significantly interfere with the conduct of research and development, and accordingly should be analyzed more honestly.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Carol J. Pierce Colfer, Senior Associate/ Visiting Fellow, CIFOR/Cornell, (c.colfer@cgiar.org) <li style="padding-left: 20px;">Link: http://www.cifor.org/online-library/browse/view-publication/publication/3352.html <li style="padding-left: 20px;">E-mail: cifor@cgiar.org <li style="padding-left: 20px;">Website: <li style="padding-left: 20px;">www.cifor.cgiar.org File:

40. PROJECT TITLE:
Participatory modelling
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research (CIFOR)
PROJECT DESCRIPTION:

<ul style="list-style-type: none"> • Participatory modelling can be a useful process to encourage critical examination of livelihood options and foster sustainable natural resource use through enhanced social learning, collective action and mobilization. It involves stakeholders in the co-design and social learning of management solutions using models as an aid to help them visualise the wider social and bio-physical processes that they cannot see unaided
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Link: http://www.cifor.org/online-library/browse/view-publication/publication/1267.html http://www.cifor.org/online-library/browse/view-publication/publication/2846.html http://www.cifor.org/online-library/browse/view-publication/publication/3293.html http://www.cifor.org/online-library/browse/view-publication/publication/1268.html http://www.cifor.org/online-library/browse/view-publication/publication/1815.html E-mail: cifor@cgiar.org Website: www.cifor.cgiar.org File:

41. PROJECT TITLE:
Multi-Criteria Analysis (MCA)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • Center for International Forestry Research (CIFOR)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • MCA is a decision-making tool developed for complex problems. In a situation where multiple criteria are involved confusion can arise if a logical, well-structured decision-making process is not followed. Another difficulty in decision making is that reaching a general consensus in a multidisciplinary team can be very difficult to achieve. By using MCA the members don't have to agree on the relative importance of the Criteria or the rankings of the alternatives. Each member enters his or her own judgements, and makes a distinct, identifiable contribution to a jointly reached conclusion.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Link: http://www.cifor.org/acm/methods/mca.html http://www.cifor.org/livesinfores/publications/pdf_files/toolbox-9c.pdf E-mail: cifor@cgiar.org Website: www.cifor.cgiar.org File: toolbox-9c.pdf

42. PROJECT TITLE:
CAPRI Research Project “Collective Action to Secure Property Rights for the Poor: Avoiding Elite Capture of Natural Resource Benefits and Governance Systems”
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research (CIFOR) and IFPRI
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Participatory research with local communities through planning-action-reflection steps attempting to engage in equitable collective action, to secure property rights and to articulate aspirations through development forums. Local officials were also engaged in advocacies for collaborative land use planning and forest resource benefit distribution
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• HeruKomarudin, (h.komarudin@cgiar.org) Carol Colfer, (c.colfer@cgiar.org) Link: http://www.cifor.org/acm/projects/capri-summary.html E-mail: cifor@cgiar.org Website: ww.cifor.cgiar.org

43. PROJECT TITLE:
The Application of Participatory Action Research to Climate Change Adaptation: A Reference Guide
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Center for International Forestry Research (CIFOR) with IDRC and DFID
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Provides a set of concepts and practical tools for use by Climate Change Adaptation in Africa program grantees working to support stakeholders (communities, government agencies, policy makers) in their efforts to adapt – or to help others adapt – climate change. The Guide nevertheless presents a generic set of concepts and tools that is likely to be of use to others engaged in climate change adaptation research and development efforts in the region, or those working to address other development challenges requiring a multistakeholder learning-by-doing approach.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Link: http://www.dfid.gov.uk/r4d/PDF/Outputs/ClimateChange/CCAA-PAR-guide.pdf E-mail: cifor@cgiar.org Website: www.crdi.ca/acca File: IDL-48890.pdf

4. International Water Management Institute

PROJECT TITLE:
Adaptive, Participatory and Integrated Assessment and Agro-ecosystem Analysis to Support Decisionmaking for Water Allocation for Fisheries and Agriculture in the Tonle Sap Wetland System
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Water Management Institute
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Commune agro-ecosystems analysis (CAEA) is a participatory approach designed to help communities improve decision making at the commune (subdistrict) level. To better integrate fisheries considerations into the CAEA process, the CGIAR Challenge Program on Water and Food (CPWF) initiated the project that significantly improved the way fisheries issues are addressed. The use of CAEA has been officially adopted as a national policy for agricultural development.
CONTACT INFORMATION:

45. PROJECT TITLE:
Participatory diagnostic tools under the West African Irrigation Project (WAIPRO)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Water Management Institute

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The tool is used for identifying the constraints of irrigation systems and implementing appropriate interventions. Water professionals such as irrigation engineers in Burkina Faso and Niger were trained on participatory diagnostic tools through the West African Irrigation Project (WAIPRO).
CONTACT INFORMATION:
<p>File : “Building the capacity of farmers and researchers in the water sector,” in: Annual_Report_2011.pdf</p>

46. PROJECT TITLE:
<p>Participatory opportunity and constraint analysis and methodology in the conduct of field-scale and community-level case studies, methodology used in AgWater Solutions Project</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Water Management Institute, Food and Agriculture Organization of the United Nations (FAO), iDE, the International Food Policy Research Institute (IFPRI) and the Stockholm Environment Institute (SEI)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The objective of the project was to identify investment options and opportunities in agricultural water management with the greatest potential to improve incomes and food security for poor farmers. Participatory opportunity and constraint analysis and methodology was used in the field-scale and community-level case studies to understand the complex interaction among social, economic and physical factors that influence the uptake and success of AWM options, and to identify technologies appropriate to different contexts in each of the project countries.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • (http://awm-solutions.iwmi.org/home-page.aspx) or contact the AgWater Solutions Project Secretariat (AWMSolutions@cgiar.org)

47. PROJECT TITLE:
<p>Adaptive, Participatory and Integrated Assessment (APIA): approach for Impact assessments for inland fisheries</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Water Management Institute

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• 'Improved' impact assessment tool that takes full account production and livelihood impacts of modified river flows along with the traditional assessment of ecological impacts, and the interactions between these. It builds upon commonly used frameworks for Environmental Impact Assessment but places particular emphasis on a holistic assessment that is integrated across disciplinary perspectives and sectoral interests. It relies on participation by stakeholders for the capture of local knowledge, for identification and resolution of critical issues and conflicts of interest and for generation of management recommendations that will command broad-based support and local 'ownership'. Assessment of APIA as a tool was done in KirindiOya Irrigation and Settlement Project (KOISP), a major agricultural development scheme in the dry zone of Sri Lanka.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Sophie Nguyen-Khoa, Researcher at the IWMI Laurence Smith, Senior Lecturer at Imperial College London Kai Lorenzen, Senior Lecturer at Imperial College London Email: iwmi@cgiar.org File:WOR89

48. PROJECT TITLE:
Ghana Dams Dialogue (GDD) to overcome the social costs of dam development
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Water Management Institute
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The founding principle for the creation of GDD was that, increased interaction between key stakeholders was critical for sustainable dam development. The project successfully brought together dam-affected communities, hydropower authorities, government ministries and other organizations by facilitating a transparent and non-confrontational dialogue. Five years after its inception, it is the first successful inclusive planning tool for dam development in West Africa.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Edmund KyeiAkoto-Danso, (e.akoto@cgiar.org} IWMI website: www.iwmi.org File:Issue_12-Facilitating_dialogue_for

49. PROJECT TITLE:
Rapid Rural Appraisal as research methodology in assessing impacts of Community Managed River Diversions In Tanzania , research component under AgWater solutions project
IMPLEMENTING ORGANIZATIONS:
•• International Water Management Institute
PROJECT DESCRIPTION:
•• Rapid rural appraisal was used in the first phase of the research, which covered 5 administrative regions in Tanzania (over 200 farmers from 10 irrigation schemes). The major finding was that investing in improvements to existing community managed river diversion irrigation schemes can lead to gains in water productivity and household income. Infrastructure improvements, coupled with a watershed management approach, farmer training, micro-credit and marketing, can make a significant contribution to Tanzania's poverty alleviation and development goals.
CONTACT INFORMATION:
•• Website: awm-solutions.iwmi.org Email: AWMSolutions@cgiar.org; write "Tanzania" in subject line File name: tanzaniariverdiversion.pdf

50. PROJECT TITLE:
From world cafés to road shows: using a mix of knowledge sharing approaches to improve wastewater use in urban agriculture
IMPLEMENTING ORGANIZATIONS:
•• International Water Management Institute (IWMI), University for Development Studies in Tamale, Ghana;
PROJECT DESCRIPTION:
•• Key approaches and tools applied by IWMI for the verification of research messages. The world cafes brought together farmers, traders and street food vendors to openly discuss proposed improvements in current practices and their potential for wider uptake. For enhanced mutual learning, road shows were used to facilitate knowledge sharing between researchers, end-users, policy- and decision-makers.
CONTACT INFORMATION:
•• Contact: Philip Amoaha, (p.amoah@cgiar.org), Pay Drechsela, Tonya Schuetza, GordanaKranjac-Berisavjevich, Nadia Manning-Thomas Link: http://www.tandfonline.com/doi/pdf/10.1080/19474190903451116

51. PROJECT TITLE:
Nepal climate-smart villages and learning platform
IMPLEMENTING ORGANIZATIONS:
•• IWMI
PROJECT DESCRIPTION:
•• Social learning on climate-smart practices among a network of farmers and researchers.
CONTACT INFORMATION:
•• Contact: Gopal Datt Bhatta (g.bhatta@cgiar.org), Sonja Vermeulen, Head of Research Coordinating Unit CIAT, (S.Vermeulen@cgiar.org) Link: http://ccafs.cgiar.org/blog/farmers-corner-nepalese-farmers-talk-about-changing-climate

5. International Center for Agricultural Research in the Dry Areas (ICARDA)

52. PROJECT TITLE:
Field days as approach towards Capacity Building and transfer of technology
IMPLEMENTING ORGANIZATIONS:
•• ICARDA Arabian Peninsula Regional Program (APRP)
PROJECT DESCRIPTION:
•• During the field visits, participants (usually pilot growers) were provided with technical backstopping and information on specific technologies and management practices.
CONTACT INFORMATION:
•• Ahmed T. Moustafa, Regional Coordinator ICARDA-APRP P.O.Box: 13979, Dubai, United Arab Emirates Tel: +971-4-2389513, Fax:+971-4-2389514, Email: icdub@eim.ae http://www.icarda.org/aprp File: AnnualReport2011-e3.pdf

53. PROJECT TITLE:
Farmers Field School (FFS) and On-farm demonstrations for pilot farmers (Buffel grass and spineless cactus)
IMPLEMENTING ORGANIZATIONS:
•• ICARDA Arabian Peninsula Regional Program (APRP)
PROJECT DESCRIPTION:
•• FFS is established in Oman to demonstrate cultural practices of cultivating Buffel grass and promote its adoption as a forage cultivar in place of Rhodes grass. Similar project (also in Oman) is a FFS of spineless cactus, with the objectives to spread the fodder cactus accession pads to different APRP countries and to encourage farmers to come forward to grow fodder cactus in their sub-marginal fields.
CONTACT INFORMATION:
•• Mrs. Safaa Al-Farsi Researcher for Buffel grass Eng. Saleh Al-Hinai Researcher spineless cactus File: AnnualReport2011-e3.pdf, pages 63, & 75

54. PROJECT TITLE:
Decentralized-Participatory Plant Breeding (Barley)
IMPLEMENTING ORGANIZATIONS:
•• International Center for Agricultural Research in the Dry Areas (ICARDA) and BMZ (Der Bundesminister für Wirtschaftliche Zusammenarbeit, Germany)
PROJECT DESCRIPTION:
•• A participatory breeding project conducted in Syria with the objective of testing an alternative way to produce improved varieties of crops grown in marginal environments such as barley. The project uses decentralized selection as a methodology to fit crops to the physical (climate and management) environment. However, it incorporates farmers' participation in the process as crop breeding based on decentralized selection can still miss its objectives if it does not consider their knowledge of the crops and the environment. Thus plant breeding is done to fit crops to the specific needs and uses of farming communities.
CONTACT INFORMATION:
•• Salvatore Ceccarelli and Stefania Grandò P.O. Box 5466 Aleppo (Syria) File: 5ILEIA2.pdf

55. PROJECT TITLE:
Participatory Plant Breeding Programs (wheat, barley, lentil, chickpea and faba bean)
IMPLEMENTING ORGANIZATIONS:
•• International Center for Agricultural Research in the Dry Areas (ICARDA)
PROJECT DESCRIPTION:
<p>•• PPBs are based on dynamic collaboration between plant breeding institutions and farmers and are designed to ensure that research is directly relevant to farmers' needs. As most of the programs take place in farmers' fields, PPB programs can maintain and enhance agricultural biodiversity much more effectively than conventional breeding programs. ICARDA's PPB programs are implemented in more than 50 villages in six countries (Algeria, Egypt, Eritrea, Jordan, Syria and Iran).</p> <p>A PPBs program in Iran led to the remarkable 'rediscovery' of a drought-tolerant wheat variety once thought to be long gone.</p>
CONTACT INFORMATION:
<p>•• Salvatore Ceccarelli P.O. Box 5466 Aleppo (Syria) Link: http://www.icarda.org/content/icarda-scientist-amman-%E2%80%9Cwhat-happened-was-totally-unplanned%E2%80%9D</p>

56. PROJECT TITLE:
Participatory research on water and soil conservation, rangeland and livestock management
IMPLEMENTING ORGANIZATIONS:
•• International Center for Agricultural Research in the Dry Areas (ICARDA)- North Africa Regional Program
PROJECT DESCRIPTION:
•• Research conducted in Mauritania
CONTACT INFORMATION:
File: africa-and-icarda.pdf, page 7

57. PROJECT TITLE:
Participatory soil and water management
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Center for Agricultural Research in the Dry Areas (ICARDA)- North Africa Regional Program
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Informal groups in Mauritania for water and soil conservation were set up and farmers and technicians were given hands-on training in building small dams, dikes, stone contour ridges, semi-circular bunds, terraces and runoff strips.
CONTACT INFORMATION:
File: africa-and-icarda.pdf, page 22

58. PROJECT TITLE:
A focus on the rural poor in drylands, research policy for ICARDA
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Center for Agricultural Research in the Dry Areas (ICARDA)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Researches of ICARDA are slowly improving towards participatory and community-based approaches to incorporate users' perspectives. This not only increases the efficiency and effectiveness of agricultural research, but delivers what farmers want. Development of integrated crop-livestock production systems in the low-rainfall areas of West Asia and North Africa has shown the importance of the community approach in the sustainable management of collective property resources, such as rangelands and water. This approach has been widely adopted by national programs in dry areas.
CONTACT INFORMATION:
File: africa-and-icarda.pdf, page 2-3

59. PROJECT TITLE:
Sustainable management of pastoral resources in Mauritania
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Center for Agricultural Research in the Dry Areas (ICARDA)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Participatory approaches are applied in a research to define the parties involved and their respective roles in the implementation of the Pastoral Code in the communities of Moït and Bokoul in the Monguel area (Gorgol region). The research also determines the relationship between the Code and decentralization, and studying potential areas of conflict and bottlenecks that may emerge when the Code is applied.
CONTACT INFORMATION:
File: africa-and-icarda.pdf, page 25

60. PROJECT TITLE:
Participatory Technology Development in Upper Karkheh River Basin, Iran
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Center for Agricultural Research in the Dry Areas (ICARDA)with Agricultural Extension Education and Research Organization
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The Participatory Technology Development (PTD) project, a component of PN24 ‘Livelihood Resilience in Dry Areas’ which is a project of the CGIAR Challenge Program on Water and Food was extensively documented in the document, “Gathering Wisdom from the Field: Participatory Technology Development in Upper Karkheh River Basin, Iran.” The book outlines how the research paradigm in Iran transformed from the conventional one towards participatory and people-centered research.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Dr. Francis Turkelboom and later Dr. Adriana Bruggeman, Integrated Water and Land Management Program (IWLM), ICARDA. E-mail: ICARDA@cgiar.org Website: www.icarda.org File: Gathering_wisdom.pdf

61. PROJECT TITLE:
A gender Analysis Perspective for Improved Livelihoods in the Karkheh River Basin
IMPLEMENTING ORGANIZATIONS:
•• International Center for Agricultural Research in the Dry Areas (ICARDA)with Agricultural Extension Education and Research Organization
PROJECT DESCRIPTION:
•• Social survey (quantitative research) and participatory rural appraisal - PRA- (qualitative research) were carried out in a study conducted in Merek (Kermanshah Province) and Honam (Lorestan Province) in Iran. The study aims to find new ways of improving the incomes of rural households, based on the role of women in agricultural production and the division of labor in socioeconomic activities between men and women.
CONTACT INFORMATION:
•• MohamadEffati, MalikaAbdelali-Martini, AkramAbbasi, and ShohrehSoltani. E-mail: ICARDA@cgiar.org Website: www.icarda.org File: Gender_KRB-8.pdf

6. World Agroforestry Centre (ICRAF)

62. PROJECT TITLE:
Naturally African Platform
IMPLEMENTING ORGANIZATIONS:
•• World Agroforestry Centre
PROJECT DESCRIPTION:
•• An-African Innovation Platform (forum) that links research, information and policy geared towards promoting opportunities for small-scale African producers. The forum provides leverage for small-scale producers, processors, marketers, exporters and regulators to work together and improve their livelihoods. The platform gives priority to business development by creating new market opportunities, ensuring equitable returns to producers, promoting networking opportunities and developing international standards.

CONTACT INFORMATION:
<ul style="list-style-type: none"> • Link: http://www.naturallyafricanplatform.org/napData/index.php Telephone Contacts: +254-020-722-4161; +254-727-324548 E-mail:

63. PROJECT TITLE:
Participatory Tree Domestication
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • ICRAF
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The Participatory Domestication of high-value indigenous fruit, nut and medicinal trees is an ICRAF program implemented in various countries. Villagers are helped to develop local nurseries, taught skills of vegetative propagation, and assisted with the technical implementation of selecting superior trees for cultivar development, that meet specific market-oriented ‘ideotypes.’ This is building on the many products of indigenous trees that have existing local and regional markets, with additional potential niches in international commerce.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Link: http://www.worldagroforestry.org/downloads/publications/PDFs/TM17346.PDF http://www.worldagroforestry.org/downloads/publications/PDFs/B16554.PDF http://www.worldagroforestry.org/downloads/publications/PDFs/ja06003.pdf http://www.worldagroforestry.org/downloads/publications/PDFs/WP16850.PDF Email: () Telephone: Website: File: The fruits of success wild fruit trees domestication.pdf, agroforestry tree domestication primer.pdf putting participatory domestication into practice in WCA.pdf tree domestication in peruvian amazon.pdf

64. PROJECT TITLE:
Participatory Approaches for Systems Intensification
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • The African Highlands Initiative (AHI)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Approach implemented by the African Highlands Initiative in its technology adoption program. It features the inclusion of farmers in AHI's research processes. It also adopts a team-based, multidisciplinary approach toward solving locally identified problems.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Email: (ahi@cgiar.org) Website: http://worldagroforestry.org/projects/african-highlands/overview.html http://worldagroforestry.org/projects/african-highlands/theme1b.html

65. PROJECT TITLE:
Rewards for, use of and shared investment in pro-poor environmental services, phase2 (RUPES 2)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • World Agroforestry Center, IFAD, Wetlands International, WWF, International Centre for Integrated Mountain Development, IUCN, CIFOR, NGOs and national governments
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Second phase of RUPES, a program that operationalizes the concept of rewarding people to protect or enhance environmental services that benefit businesses or the wider population. It takes on the challenge of devising schemes that actually work in practice and can sustain themselves without ongoing external funding and institutional support from development agencies and NGOs. RUPES is a long-term research program dedicated to developing practical environmental services schemes that can be adapted to work in different countries with different circumstances. The research target group for RUPES 2 is indigenous forest dwellers and smallholder farmers in less productive environments that are vulnerable to environmental degradation and climate change. Activities will seek to improve these communities' knowledge, institutional and social capital through participating in rewards for environmental services schemes.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Beria Leimona, RUPES Project Coordinator, (l.beria@cgiar.org; rupes@cgiar.org), Carla De Gregorio, IFAD Grants Coordinator, Asia and Pacific Division (c.degregorio@ifad.org) Links: http://rupes.worldagroforestry.org/ http://www.worldagroforestry.org/sea/Publications/files/leaflet/LE0159-09.PDF http://www.worldagroforestry.org/sea/sites/default/files/download/documents/UPDATE-ProjectProfiles/PP%20update_rupesII.pdf

66. PROJECT TITLE:
Integrated Information and Communication Technologies for Farm-Level Access to Natural Resource Management Information
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • World Agroforestry Centre (ICRAF) - African highlands Initiative (AHI)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Project that address the disparity in farmers' information needs and their access to information. It integrates information and communication technologies that connected farmers to appropriate information using multiple information sources and media including telecentres and village information centres. The centres were equipped with portable phones, printed materials like leaflets, brochures, pamphlets, research reports and books.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Kenneth Masuki, Knowledge Management Specialist ICRAF (k.masuki@cgiar.org) Tel: +256 414 220 611 • Links: http://www.km4dev.org/video/use-of-ict-by-smallholder-farmers-in-kabale-uganda http://www.worldagroforestry.org/downloads/publications/PDFs/MM09247.PDF

67. PROJECT TITLE:
Creating an Evergreen Agriculture in Africa for Food Security and Environmental Resilience
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • World Agroforestry Centre (ICRAF)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • to double or even triple smallholder maize yields using sustainable techniques that regenerate the natural resource base without an overall increase in labour or the need to apply nitrogen fertilizers, using agroforestry techniques and conservation agriculture techniques. The Farmer Managed Natural Regeneration movement in Niger, Mali, Burkina Faso, which has had tremendous impact, has influenced ICRAF, and they are seeking to build on/improve this.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Denis Garrity c/o (icraf@cgiar.org); •• Link:

7. WorldFish Center

68. PROJECT TITLE:
Strengthening Aquatic Resource Governance (STARGO)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Worldfish, Adelphi Research, Lake Victoria Fisheries Organization, Makerere Institute for Social Research, Uganda, Uganda Department of Fisheries, Zambia Center for Applied Social Science, University of Zimbabwe Fisheries Administration, Cambodia Development Resource Institute
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The STARGO project aims to build resilient livelihoods among poor rural producers who depend on the highly contested natural resources in the freshwater ecoregions of Lake Victoria, Lake Kariba and the Tonle Sap Lake, with the intent of improving nutrition, income, welfare and human security, while also reducing the likelihood of broader social conflict. The project will develop and pilot new tools to assess the linkages between environmental resources and conflict, and also identify opportunities for peace building through collaborative resource management. This will be done by actively involving local stakeholders in not only assessing but also collaborating to address the sources of local resource conflict.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Blake Ratner, Project leader •• Link: http://www.worldfishcenter.org/our-research/ongoing-projects/building-livelihood-security-reducing-conflict-freshwater-ecoregions

69. PROJECT TITLE:
Strengthening Aquatic Resource Governance (STARGO)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Worldfish, Asian Institute of Technology, Worldwide Fund for Nature

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> WorldFish is working with partners in the Mekong Region to support a new alliance of regional and local partners that will contribute towards sustainable wetlands management that benefit the poor. This project supports the Wetlands Alliance, an extensive network of organizations—government, civil and NGOs—actively engaged in developing innovative solutions to poverty alleviation. The Alliance helps local partners to build the capacity they need to work effectively with communities that they are supporting. With backstopping support from experienced regional partners, local partners work with communities to identify key issues and jointly develop appropriate initiatives.
CONTACT INFORMATION:
<ul style="list-style-type: none"> Gareth Johnstone and Mam Kosal, Project leader Link: http://www.worldfishcenter.org/our-research/ongoing-projects/building-partnerships-for-poverty-alleviation; http://www.wetlandsalliance.org/

70. PROJECT TITLE:
Gender transformative approach in CGIAR Research Program on Aquatic Agricultural Systems
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> Worldfish
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> The approach is currently being adopted in the implementation of the CGIAR Research Program on Aquatic Agricultural Systems. The approach encourages critical awareness of gender roles and norms among men and women, challenges the distribution of resources and allocation of duties between men and women, and promotes the position of women while addressing power relationships between women and others in the community (Interagency Gender Working Group, USAID). It also focuses on deconstructing hierarchical gender norms, constructing new concepts of masculinity and femininity and thereby transforming the underlying power relations that lead to poverty and hunger.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Holly Holmes, Communications and Donor Relations, (h.holmes@cgiar.org) Tel: +604 6202 270; +601 6470 0412 •• Link: http://www.worldfishcenter.org/news-events/gender-transformative-change%E2%80%93key-lasting-agricultural-development-impact http://www.worldfishcenter.org/gender-research-workshop/gender-transformative-approach http://www.worldfishcenter.org/our-research/cgiar-research-programs/aquatic-agricultural-systems/our-approach http://www.worldfishcenter.org/resource_centre/WF_2934.pdf

71. PROJECT TITLE:
Gender and Fisheries - Strengthening community-based management of inshore fisheries towards gender equity in Solomon Islands
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Worldfish , Solomon Islands Ministry of Fisheries and Marine Resources (MFMR), Ministry of Women, Youth and Children Affairs National Council of Women
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The project is aiming to improve adaptive management as women and youth contribute their knowledge and skills to community based adaptive management (CBAM) of resources of particular interest to women (e.g., mangrove fruits, mangrove shells, mangrove wood, near shore reef fish. The inclusion of youth ensures a continuity of community-based resource management practices, as well as acknowledging the greater potential to change gender relations (in the form of norms, behaviour and attitudes) between young women and men.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Dr Anne-Marie Schwarz, (A.Schwarz@cgiar.org) •• Link: http://www.worldfishcenter.org/our-research/gender-inclusive-resource-management

72. PROJECT TITLE:
Improving Mekong Dam Dialogues: A Participatory Assessment of the Impact of Dams on the Livelihoods of the Mekong
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Uses the thaibaan research methodology (called 'sao ban' in Laotian), an extremely participatory process for video production to help villagers explore the positive and negative impacts of dams outside the immediate dam area. the output is a series of short films and documentaries made by communities, and which we can then use to table community perspectives in hydropower decision-making for a.
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The project is aiming to improve adaptive management as women and youth contribute their knowledge and skills to community based adaptive management (CBAM) of resources of particular interest to women (e.g., mangrove fruits, mangrove shells, mangrove wood, near shore reef fish. The inclusion of youth ensures a continuity of community-based resource management practices, as well as acknowledging the greater potential to change gender relations (in the form of norms, behaviour and attitudes) between young women and men.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• DrLilaoBouapao, CPWF-Mekong Multi-Stakeholder Platform Coordinator PhouthasinhPhimmachanh, Lao Water Resources Network •• Link: http://mekong.waterandfood.org/archives/1272

8. AfricaRice(WARDA)

73. PROJECT TITLE:
Work in Cambodia's Tonle Sap Lake
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• WorldFish
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• A good example of important outcomes (policy and institutional change) from action research in the governance domain, though not focused specifically on climate change:

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Blake Ratner, Program Leader, Governance, Visiting Sr Research Fellow IFPRI, •• Email: b.ratner@cgiar.org •• Link: http://www.worldfishcenter.org/outcome/success-stories/building-resilient-community-fisheries-tonle-sap-lake-cambodia http://www.capri.cgiar.org/pdf/capriwp103.pdf http://www.new-ag.info/en/research/innovationItem.php?a=2714

74. PROJECT TITLE:
NERICA Dissemination Project in West Africa
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• AfricaRice
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The project engages farm families in participatory variety selection (PVS) strategy to accelerate NERICA dissemination. The objective of the project is to help small-scale producers in the seven pilot countries to improve rice production and incomes through the dissemination of NERICA and other improved varieties and complementary technology. About 80% of the targeted beneficiaries of the project are the rural poor, mostly women.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Inoussa Akintayo •• Link: www.africarice.org

75. PROJECT TITLE:
Zooming-in Zooming-out Approach
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• WARDA

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • An approach to guide especially international research and development organizations to create regionally relevant learning materials that are locally appropriate. This can be applied to any media form (WARDA).
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Paul van Mele, Former Learning and Innovation Systems Specialist, WARDA, Director, AgroInsight (paul@agroinsight.com) InoussaAkintayo, African Rice Initiative Coordinator, WARDA (i.akintayo@cgiar.org) http://www.agroinsight.com/downloads/Articles-Agricultural-Extension/5_RDN%20-%20Zooming-in%20zooming-out%20-%20Van%20Mele%202010.pdf

76. PROJECT TITLE:
Participatory approaches
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • WARDA, ICARDA, IRRI
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Include participatory plant breeding, plant technology development, plant varietal selection, community-based approaches, gender-sensitive approaches, farmer field schools.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • StefaniaGrando, CRP Programme Officer, CGIAR (s.grando@cgiar.org)

77. PROJECT TITLE:
Participatory Learning for Action Research (PLAR)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • WARDA
PROJECT DESCRIPTION:

<ul style="list-style-type: none"> • A participatory learning and action research approach among inland valley development stakeholders (farmers, change agents, extension, research) will enable farmers to become experts in managing their inland valleys, emphasizing adaptive response to context-specific problems and making the best use of available resources, local knowledge and decision making, as well as research-based understanding and analysis of underlying processes.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Marco Wopereis, Deputy Director General, Director for Research for Development, WARDA(m.wopereis@cgiar.org) • Links: PLAR Facilitator's Manual; and PLAR Technical Manual

78. PROJECT TITLE:
Rice Videos, with s Similar initiative: Video viewing club by IITA
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • WARDA
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • WARDA's rice videos are available in more than 20 African languages, and are seen on national television in Gambia, Guinea, Nigeria and Uganda. The videos explains the 'how to's' and the 'why's' behind the technologies and processes. They were based on adult-learning principles, fully valorizing and building on farmers' knowledge.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Paul van Mele, Former Learning and Innovation Systems Specialist, WARDA, Director, AgroInsight (paul@agroinsight.com) InoussaAkintayo, African Rice Initiative Coordinator, WARDA (i.akintayo@cgiar.org) • Link: Rice Videos

9.

Biodiversity International

79. PROJECT TITLE:
Indigenous Partnership for Agrobiodiversity and Food Sovereignty
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Biodiversity International, Platform for Agrobiodiversity Research (PAR), the International Institute for Environment and Development (IIED) and Slow Food International, supported by The Christensen Fund
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The partnership's mission is to improve ways of linking indigenous peoples and local communities interested in pursuing self-determined development and to facilitate such communities in taking a leadership role in agrobiodiversity dialogues. It aims to advocate and strengthen the voice of indigenous groups at policy level and promote their unique wisdom.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Link: http://agrobiodiversityplatform.org/mission/activities/indigenous-partnership-for-agrobiodiversity-and-food-sovereignty/indigenous-partnership-for-agrobiodiversity-and-food-sovereignty/ http://agrobiodiversityplatform.org/mission/activities/indigenous-partnership-for-agrobiodiversity-and-food-sovereignty/files/2010/11/Cusco-Photo-Story-Final.pdf http://agrobiodiversityplatform.org/mission/activities/indigenous-partnership-for-agrobiodiversity-and-food-sovereignty/files/2010/11/Cusco-Scoping-Report-Nov-2010-Final.pdf

80. PROJECT TITLE:
Payment for Agrobiodiversity Conservation Services (PACS)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Biodiversity International
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The application of Payment for Ecosystem Services (PES) specifically for agricultural biodiversity conservation. This is recognition of the value of farmers' work in maintaining such agrobiodiversity, and the provision of positive incentives that adequately compensate them for doing so (for protecting the priority crops that are at the most risk of extinction).

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Adam G. Drucker, Senior Economist, Bioversity (a.drucker@cgiar.org) •• Link: http://www.bioversityinternational.org/research/sustainable_agriculture/pacs.html

81. PROJECT TITLE:
On-farm conservation of neglected and underutilised species
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Bioversity International, with partners in India, Nepal and Bolivia
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The project ‘Reinforcing the resilience of poor rural communities in the face of food insecurity, poverty and climate change through on-farm conservation of local agrobiodiversity’ will: investigate the use of neglected and underutilized species in increasing the adaptation and resilience of production systems in the face of climate change; examine the role of men and women farmers in conservation practices; develop participatory monitoring systems for local agrobiodiversity; and strengthen on farm conservation and the role of custodian farmers
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Dr Stefano Padulosi(s.padulosi@cgiar.org) •• Link: http://www.bioversityinternational.org/research/sustainable_agriculture/neglected_underutilized_species/on_farm_conservation_neglected_and_underutilised_species_and_the_challenge_of_climate_change_a_new_bioversity_project.html http://www.bioversityinternational.org/fileadmin/bioversity/publications/pdfs/1512_On_farm_conservation_of_neglected_and_underutilized_species_status_trends_and_novel_approaches_to_cope_with.pdf

82. PROJECT TITLE:
Teaching Agrobiodiversity
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Bioversity

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • A guide to integrate agricultural biodiversity knowledge into education curricula in universities. The curriculum framework has 14 topics central to agrobiodiversity processes, conservation and management.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Per Rudebjer, Capacity Development Scientist, Bioversity (p.rudebjer@cgiar.org) • Link: http://www.bioversityinternational.org/fileadmin/bioversity/publications/pdfs/1495_Teaching_biodiversity_for_food_and_agriculture.pdf?cache=1348597729

83. PROJECT TITLE:
<p>SDC Phase 1: Enhancing contribution of home gardens to on-farm management of plant genetic resources and improve livelihood of Nepalese farmers (2002-2004); SDC (Phase 2)Enhancing Family Nutrition and Income for improved livelihoods of Resource Poor and Disadvantaged Groups through Integrated Home Gardens in Nepal (2006 to 2008); SDC (phase 3)Linking Home garden in inclusive development programme for contributing to securing livelihoods of resource poor and Disadvantaged groups of Nepal (2009-2013)</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • Bioversity, LI-BIRD
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Understand and document the dynamics (historical perspective, structure, composition, utilization and underlying indigenous knowledge systems) of home gardens. Relevant peer review and impact studies done.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: p.eyzaguirre@cgiar.org; PratapShrestha (pshrestha@usc-asia.org); RoshanPudasaini (rpudasaini@libird.org); Suman S. Manandhar (smanandhar@libird.org); ReshamGautam (r.gautam@cqu.edu.au); Rai-PaudyalBimala DEZA RAPBI (bimala.raipaudyal@sd.net); PashupatiChaudhary, Ph.D. (pchaudhary@libird.org); BhuwonSthapit, Bioversity International (b.sthapit@cgiar.org) • Link:

84. PROJECT TITLE:
GEF UNEP Conservation and Sustainable use of wild and cultivated tropical fruit tree species for promoting food security, livelihoods and ecosystem services in India, Indonesia, Malaysia and Thailand (2009-2014)
IMPLEMENTING ORGANIZATIONS:
•• Bioersivity with ICAR, ICHORD, DOA and MARDI
PROJECT DESCRIPTION:
•• Tropical fruit tree genetic resources are conserved in situ and on farm through strengthened capacity of farmers, user groups, local communities and institutions to sustainably apply good practices and secure benefits.
CONTACT INFORMATION:
•• Contact: Marieta.Sakalian@unep.org; b.sthapit@cgiar.org; m.bellon@cgiar.org; salma@mardi.gov.my; songpolsom@yahoo.com; Dr. B.M.C Reddy (bmcreddy@gmail.com); Lamers, Hugo (h.lamers@cgiar.org); idhawidiarsanti (idha_arsanti@yahoo.com); ChatchanokNoppornphan (chatchanok100@gmail.com); BhuwonSthapit, Bioersivity International (b.sthapit@cgiar.org)
•• Link:

85. PROJECT TITLE:
IFAD/CCFAS Reinforcing the resilience of poor rural communities in the face of food insecurity, poverty and climate change through on-farm conservation of local agrobiodiversity.
IMPLEMENTING ORGANIZATIONS:
•• Bioersivity through Nepal (LI-BURD). India (MSSRF) and Bolivia (PROINPA Foundation)
PROJECT DESCRIPTION:
•• Develop and test new methods and tools in close partnership with farmers and value chain actors aimed at enhancing their capacities to sustainably conserve traditional crops and associated knowledge at the farm level; Explore ways of integrating the monitoring of diversity on-farm, along with use-enhancement goals, through interdisciplinary and multi-sector approaches; Promote a more balanced complementary conservation agenda in national programmes, based on the need to combat genetic erosion and to meet the needs of agrobiodiversity users; and Provide useful findings to guide further research related to climate change and its impact on species and varieties deployed in local production systems.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: SajalSthapit (ssthapit@libird.org); s.padulosi@cgiar.org; PashupatiChaudhary, Ph.D. (pchaudhary@libird.org); KeshabThapa (kthapa@libird.org); Oliver King (ediok151173@gmail.com) •• Link:

10. International Center for Tropical Agriculture (CIAT)

86. PROJECT TITLE:
Dry-season forages to improve the livelihoods of smallholders in Eastern Africa
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Center for Tropical Agriculture (CIAT) with German Federal Ministry for Economic Cooperation and Development (BMZ)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The project aims to improve smallholder livelihoods in Kenya, Uganda, and Rwanda by increasing the availability of dry-season forage for their livestock. Work is jointly carried out with farmers already members of different research and development networks.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Brigitte L. Maass (Profile) Email: (b.maass@cgiar.org) •• Link: http://www.ciat.cgiar.org/ourprograms/Agrobiodiversity/cassava/Pages/ProjectPortafolio.aspx

87. PROJECT TITLE:
Improved forage-based feeding systems for smallholder livelihoods in the Cambodia-Laos-Vietnam development
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Center for Tropical Agriculture (CIAT), International Fund for Agricultural Development (IFAD)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • This project will focus on improving smallholders' production skills, increasing demand awareness, and establishing effective and efficient linkages among value-chain stakeholders to gain wider market access.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Tassilo Tiemann (Profile) • Email: t.tiemann@cgiar.org • Link: http://www.ciat.cgiar.org/ourprograms/Agrobiodiversity/cassava/Pages/ProjectPortafolio.aspx

88. PROJECT TITLE:
<p>Increased productivity, competitiveness and sustainability of systems of small and medium livestock producers in the Patía Basin and Popayán Plateau (Country: Colombia)</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Center for Tropical Agriculture (CIAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Under agreement with CIAT and led by the Universidad del Cauca, new forage technologies are being introduced and evaluated using a participatory approach working with small- and medium-sized livestock producers from northern Cauca, Colombia. The project aims to identify, assess and co-develop germplasm of forage species suitable for the conditions of Patía and Popayan, and also to evaluate the production and use of high-quality forages incorporated into farming systems.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Michael Peters (Profile) • Email: m.peters-ciat@cgiar.org • Link: http://www.ciat.cgiar.org/ourprograms/Agrobiodiversity/cassava/Pages/ProjectPortafolio.aspx

89. PROJECT TITLE:
Improving livelihoods of smallholder upland farmers through improved and integrated cassava-based cropping and livestock systems(Cambodia, Lao PDR, Myanmar, Vietnam)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Center for Tropical Agriculture (CIAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • This project aims to develop, together with farmers, technologies that will increase the income and improve the livelihoods of smallholder farmers living in the uplands of Lao PDR and Cambodia. This will be achieved by disseminating the selected technologies for improved cassava livestock production systems to many farmers, supporting national institutions in conducting strategic and applied research and developing procedures for monitoring the impact of new technologies on farmers' livelihoods and the environment.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Michael Peters (Profile) • Email: m.peters-ciat@cgiar.org

90. PROJECT TITLE:
Going to scale: Developing strategies for scaling out market-oriented organic agriculture from farmer group to association level in Africa
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Center for Tropical Agriculture (CIAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The overall goal of this project is to contribute towards poverty alleviation, food security, improved nutrition, and better resource management through market-oriented organic agriculture. Farmers in selected communities (with emphasis on gender and marginalized groups) and other key stakeholders will be able to identify market opportunities, develop sustainable community-based agroenterprises, and better manage their natural resources at farmer association level within sub-counties.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Jeroen Huising (Profile), Eliud Birachi (Profile) •• Email: j.huising@cgiar.org ; e.birachi@cgiar.org •• Link:

91. PROJECT TITLE:
Learning alliances: An approach for building multistakeholder innovation systems
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• Rural Agroenterprise Development Project of the International Center for Tropical Agriculture (CIAT)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• A learning alliance is a process undertaken jointly by research organizations, donor and development agencies, policymakers and private businesses that engage multiple stakeholders in processes of innovation. The initiative is enhancing learning and improving effectiveness in rural enterprise development to ensure that useful research results reach the poor, the lessons learned influence research, and donor and policy agendas are relevant as it could be. The process involves identifying, sharing and adapting good practices in research and development in specific contexts.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Mark Lundy (m.lundy@cgiar.org), Senior Research Fellow Maria Veronica Gottret, Visiting Researcher at the Rural Agroenterprise Development Project, CIAT •• Jacqueline Ashby is Director of the Rural Innovation Institute and Sociologist at CIAT. •• Links: http://crsprogramquality.org/2009/04/agroe-learning-alliance/ http://www.crsprogramquality.org/2009/04/agroenterprise-case-studies

92. PROJECT TITLE:
Social Network Analysis
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• CIAT, WorldFish

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • This tool is used to visualize responsibilities, interests and partnerships
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Sophie Alvarez, Consultant, CIAT (b.sophie.alvarez@gmail.com) ;BoruDouthwaite, Principal Scientist, WorldFish (b.douthwaite@cgiar.org). • Link:

93. PROJECT TITLE:
Legumes for pigs project
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • CIAT Asia with NAFRI (Laos) and funded by ACIAR
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Improving pig feed systems and scaling out by linking with multiple development partners through a pig systems learning alliance. Evidence of impact – both direct and indirect; thematic focus of the learning alliance was considered a key to the impacts.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Werner Stür (w.stur@cgiar.org); PhonpaseuthPhengsavanh; Rod Lefroy (r.lefroy@cgiar.org); CheshaWettasinha, Senior Advisor ProInnova International Support Team, ETC foundation (c.wettasinha@etcnl.nl) • Link:

94. PROJECT TITLE:
Participatory Social Return on Investment (PSROI)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • CIAT/ Oxford University (CCAFS)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• A new approach to cost-benefit analysis that aims to first discover how a community can best adapt to climate change, and then uses stakeholder participation to measure the costs and benefits of the priority interventions. It is a participatory method for discovering the costs and benefits (economic, social and environmental) of an organization, policy or project. It uses focus groups and interviews with a wide range of stakeholders to create visual Impact Maps that tell the story of how change is being created and how the impacts can best be measured – all from the perspective of those directly affected.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Chase Sova: c.sova@cgiar.org; Osana Bonilla-Findji, Science Officer, CCAFS Theme 1/CIAT, (o.bonilla@cgiar.org) •• Link: Community-Based Adaptation Costing: An integrated framework for the participatory costing of community-based adaptations to climate change in agriculture by Chase Sova, Abrar Chaudhury, Ariella Helfgott, Caitlin Corner-Dolloff: http://ccafs.cgiar.org/sites/default/files/assets/docs/ccafs-wp-16-psroi.pdf http://ccafs.cgiar.org/blog/rural-communities-get-hands-climate-adaptation-planning http://dapa.ciat.cgiar.org/a-new-perspective-on-adaptation-prioritisation-and-costing-in-the-mekong-region/

95. PROJECT TITLE:
Farms of the future project
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• CIAT/ Adelaide University (CCAFS)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• On the ground empirical testing of the use of the climate Analogue tool as support for designing adaptation strategies in agriculture. The CCAFS “Farms of the Future” project uses the climate analogue tool to connect farmers to their possible climate futures via farm visits. This novel approach of farmer-to-farmer exchanges between spatial analogues integrates participatory learning principles, in order to promote knowledge sharing between producer communities. The approach also permits the participatory diagnosis of capacities and needs, thus aiding in the design of community-appropriate adaptation strategies. Lastly, it improves understanding of local practices and available tools for enabling change and allows addressing farmer’s social, cultural and gender specific barriers for enabling behavioral change and improve adaptive capacity.

CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Andy Jarvis (a.jarvis@cgiar.org); Ariella Helfgott (ariella.helfgott@ouce.ox.ac.uk); Valery Nelson (valairn@ntlworld.com) • Link: http://ccafs.cgiar.org/blog/finding-future-farmers-beora-nepal • http://ccafs.cgiar.org/blog/one-mans-future-another-mans-present-farms-future-hits-tanzania

96. PROJECT TITLE:
Designing and promotion of benefit-sharing mechanisms (BSMs)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Center for Tropical Agriculture (CIAT), Stockholm Environment Institute (SEI), WWF, National University of Colombia (UNAL)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Part of a larger project funded by the Challenge Program on Water and Food (CPWF), the BSM is a collective action process where an agreement among watershed inhabitants and stakeholders aims to solve the existing problems in the region such as deforestation, erosion, pollution of water bodies, reduced flow, loss of biodiversity and soil fertility. It seeks the satisfaction of both collective and individual interests without prejudicing the baseline resources, quality of life and well-being of the affected population. The project is developed for three Andean countries: Bolivia (EL Alto, La Paz), Colombia (Coello, Combeima, Alto Putumayo) and Peru (Santa). The project seeks to identify the variables that need to be taken into account when BSMs are designed as means to fight against rural poverty and environmental degradation. In this sense, the Citizen Action Discussion Group (Conversatorio de Acción Ciudadana) serves as a community tool for effective participation and influence on decision-making, linking rights and duties of citizens with conflicts that affect this group.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Marcela Quintero – CIAT (m.quintero@cgiar.org); Osana Bonilla-Findji, Science Officer, CCAFS Theme 1/CIAT (o.bonilla@cgiar.org) • Link: http://dapa.ciat.cgiar.org/collective-action-through-benefit-sharing-mechanisms-a-way-out-of-rural-poverty-inequality-and-environmental-degradation/

97. PROJECT TITLE:**Participatory Impact Pathways****IMPLEMENTING ORGANIZATIONS:**

- CIAT

PROJECT DESCRIPTION:

- Monitoring and Evaluation

CONTACT INFORMATION:

- Contact: Sophie Alvarez b.sophie.alvarez@gmail.com; Simone Staigers.staiger@cgiar.org
- Link: <http://boru.pbworks.com/w/page/13774903/FrontPage>

11. International Food Policy Research Institute (IFPRI)**PROJECT TITLE:****System-wide Program on Collective Action and Property Rights (CAPRI)****IMPLEMENTING ORGANIZATIONS:**

- All 16 CGIAR centers (CIAT, CIFOR, CIMMYT, CIP, ICARDA, ICLARM, ICRAF, ICRISAT, IIMI, IITA, ILRI, IRRI, WARDA, ISNAR, IPGRI) with IFPRI, as the convening center

PROJECT DESCRIPTION:

- CAPRI is an Inter-Center Initiative of CGIAR which examines the formation and effectiveness of voluntary, community-level organizations and property institutions as they relate to natural resource management. It aims to promote comparative research on the role played by property and collective action institutions in shaping the efficiency, sustainability and equity components of natural resource systems. The issues of property rights and collective action are of special concern to the CGIAR because of their effect on technology adoption, natural resource management, and poverty alleviation.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Links: http://www.capri.cgiar.org/pdf/devolution_organizers.pdf Publications on property rights: http://www.capri.cgiar.org/pubs.asp Phone: +1 202-862-5600 Fax: +1 202-467-4439 E-mail: capri@cgiar.org E-mail: cifor@cgiar.org Website: http://www.capri.cgiar.org/ File: capri lessons from tonle sap.pdf

96. PROJECT TITLE:
Designing and promotion of benefit-sharing mechanisms (BSMs)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Center for Tropical Agriculture (CIAT), Stockholm Environment Institute (SEI), WWF, National University of Colombia (UNAL)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Part of a larger project funded by the Challenge Program on Water and Food (CPWF), the BSM is a collective action process where an agreement among watershed inhabitants and stakeholders aims to solve the existing problems in the region such as deforestation, erosion, pollution of water bodies, reduced flow, loss of biodiversity and soil fertility. It seeks the satisfaction of both collective and individual interests without prejudicing the baseline resources, quality of life and well-being of the affected population. The project is developed for three Andean countries: Bolivia (EL Alto, La Paz), Colombia (Coello, Combeima, Alto Putumayo) and Peru (Santa). The project seeks to identify the variables that need to be taken into account when BSMs are designed as means to fight against rural poverty and environmental degradation. In this sense, the Citizen Action Discussion Group (Conversatorio de Acción Ciudadana) serves as a community tool for effective participation and influence on decision-making, linking rights and duties of citizens with conflicts that affect this group.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Link: http://www.ifpri.org/book-4890/ourwork/program/learning-and-capacity-strengtheninghttp://cgmap.cgiar.org/factsheets/2011-2013/IFPRI/CapacityS1/CapacityS1:++Capacity+Strengthening+for+Policy+and+Research+%28GRP+35%29.htm

12. International Institute of Tropical Agriculture (IITA)

PROJECT TITLE:
Yam Improvement for Income and Food Security in West Africa (Ghana and Nigeria)
IMPLEMENTING ORGANIZATIONS:
•• International Institute of Tropical Agriculture (IITA)
PROJECT DESCRIPTION:
•• The project will adopt a value chain approach and will build the capacity of farmers and farmers' organizations (FOs) and their service providers (SPs) (e.g. NARES, NGOs, input suppliers, etc.) to ensure that technical innovations as well as improved access to yam markets will sustainably benefit smallholder yam producers. It will ensure that not only significant numbers of beneficiaries are reached, but it will provide the opportunity for future sustainability and scalability. Gender and diversity analyses will be built into value chain and scoping studies to ensure that project activities are designed to specifically benefit women and small-scale farmers groups.
CONTACT INFORMATION:
•• Links: http://www.iita.org/web/yiifswa/home http://www.iita.org/web/yiifswa/background

13. International Livestock Research Institute (ILRI)

PROJECT TITLE:
Better policy and management options for pastoral lands: Assessing trade-offs between poverty alleviation and wildlife conservation (Reto O Reto)
IMPLEMENTING ORGANIZATIONS:
•• International Livestock Research Institute (ILRI).
PROJECT DESCRIPTION:
•• The Reto-o-Reto project, led by a collaborative research – facilitation team, was designed to create the knowledge and relationships to enable poor pastoral and agro-pastoral communities to influence local and national land-use policies affecting their livelihoods (access to pasture, water) and the sustainability of biodiversity (wildlife) in the areas where they live.

CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: • Links: http://www.ilri.org/retooreto http://mahider.ilri.org/handle/10568/224 0 http://retooreto.wordpress.com/

102. PROJECT TITLE:
Designing community-based breeding strategies for indigenous sheep breeds of smallholders in Ethiopia
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Livestock Research Institute (ILRI), International Centre for Agricultural Research in the Dry Areas, Ministry of Agriculture (Ethiopia), Universität für Bodenkultur Wien, University of Edinburgh
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • This project will develop and test community-based breeding strategies for resource poor sheep owners in the highlands of Ethiopia. It will operationalize a arising approach in genetic improvement of livestock breeds which necessitates the involvement of local communities and institutions in the design of breeding strategies and implementation of resulting programs. Among its expected results are the definition of breeding goals through participatory manner by farmers and at least one breeding program established per breed; and a methodological framework for the development of community based breeding programs for smallholder producers, including institutional arrangements.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Aynalem Haile, • Links: http://mahider.ilri.org/handle/10568/1676 http://www.ilri.org/DesigningCommunity-basedBreeding

103. PROJECT TITLE:
Women and Livestock Challenge Dialogue
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Livestock Research Institute (ILRI).

PROJECT DESCRIPTION:

- Global Challenge Dialogue on Women and Livestock is an e-consultation that involved knowledgeable and influential thinkers and doers from around the world in deepening understanding of the challenge, seeking ideas, and devising a strategy and action plan that will realize tangible impacts of fighting poverty through women and livestock. It includes creating new ways to empower women livestock keepers to further develop themselves, their families, their communities and their nations.

CONTACT INFORMATION:

- Contact: Patti Kristjanson, Innovation Works Leader ILRI
- Email: p.kristjanson@cgiar.org
- Links: <http://www.ilri.org/innovationworks>

104. PROJECT TITLE:**Enhancing livelihoods of poor livestock keepers through increased use of fodder****IMPLEMENTING ORGANIZATIONS:**

- International Livestock Research Institute (ILRI), Centro Internacional de Agricultura Tropical, International Centre for Agricultural Research in the Dry Areas.

PROJECT DESCRIPTION:

- The project seeks to engage with a wide range of stakeholders to strengthen the capacity of poor livestock keepers to select and adopt fodder options as well as access market opportunities to enable them to improve their livelihoods. Among its targets, it seeks to establish mechanisms for strengthening and/or establishing consortia of players in the livestock/fodder arena to allow small-scale innovations to spread across systems and identify options for getting research off the shelf and into practice including innovative communication strategies and strategies for making changes at farm level to sustainably improve fodder supply.

CONTACT INFORMATION:

- Contact: Alan Duncan,
- Links: <http://fodderadoption.wordpress.com>
<http://mahider.ilri.org/handle/10568/226>
<http://www.ilri.org/FAP>

105. PROJECT TITLE:
Gender, Agriculture, and Assets Project (GAAP)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Livestock Research Institute (ILRI) and the International Food Policy Research Institute (IFPRI)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• GAAP's objective is to better understand gender and asset dynamics in agricultural development programs. GAAP core team members works with agricultural development projects in South Asia and Sub Saharan Africa to: Identify how development projects impact men's and women's assets; Clarify which strategies have been successful in reducing gender gaps in asset access, control and ownership; and Improve partner organization's abilities to measure and analyze qualitative and quantitative gender and assets data in their Monitoring & Evaluation (M&E) plans for current and future projects. <p>Through a competitive process, eight different agricultural development projects from throughout South Asia and Sub-Saharan Africa were chosen to be a part of the GAAP portfolio (see GAAP Portfolio for specific project information). Each of these partner projects receive a grant from GAAP that allows them to conduct additional quantitative and qualitative research to look at how how men's and women's assets change over the life of their particular project.</p>
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: •• Links: http://gaap.ifpri.info/ http://www.ilri.org/node/1193

106. PROJECT TITLE:
Integrating crops and livestock for improved food security and livelihoods in rural Zimbabwe
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Livestock Research Institute (ILRI), Centro Internacional de Mejoramiento de Maíz y Trigo, Commonwealth Scientific and Industrial Research Organisation, GRM International Limited, International Crops Research Institute for the Semi-Arid Tropics, University of Queensland

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The overall goal of the project is to identify, test and prove ways to increase agricultural production, improve household food security, alleviate poverty and thereby reduce food-aid dependency in rural Zimbabwe through better integrated crop and livestock production and market participation. The project's research will also test ways to improve linkages amongst market chain actors that allow smallholder enterprises to actually exploit these. <p>It integrates a participatory technology development framework (including baseline diagnostics, stakeholder workshops, systems simulation modelling, technology screening, on-farm trials and demonstrations) with value chain analyses (market options and performance) that feed into multistakeholder platforms for knowledge exchange thereby linking to effective impact pathways.</p>
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Siboniso Moyo •• Links: http://www.ilri.org/node/1185 http://aciar.gov.au/project/CSE/2010/022

107. PROJECT TITLE:
Mutual learning of livestock keepers and scientists for adaptation to climate change in pastoral areas
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• ILRI projects associated with CRP, Kenya Agricultural Research Institute, CGIAR Research Program on livestock and fish.
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The purpose of the project is to enhance adaptation to climate variability through effective knowledge sharing processes in vulnerable ecosystems of the arid and semi arid lands (ASALs) of Kenya. This involves development and adaptation of methods that render mutual learning between livestock keepers and scientists more effective.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Links: http://www.ilri.org/node/615

108. PROJECT TITLE:
Participatory Epidemiology Network for Animal and Public Health (PENAPH)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• PENAPH implements a program integrating targeted action research, policy enhancement and education. It nurtures collaborative research and diffusion of learning among experts in participatory epidemiology from around the world, to speed detection of emerging or re-emerging diseases. Emphasis is placed on building the capacity of veterinary and public health services and educational institutions.
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The purpose of the project is to enhance adaptation to climate variability through effective knowledge sharing processes in vulnerable ecosystems of the arid and semi arid lands (ASALs) of Kenya. This involves development and adaptation of methods that render mutual learning between livestock keepers and scientists more effective.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: •• Links: http://mahider.ilri.org/handle/10568/351/browse?type=dateissued&sort_by=2&order=DESC&rpp=20&etal=0&submit_browse=Update http://penaph.net http://www.ilri.org/penaph

109. PROJECT TITLE:
Strengthening capacities for community-based livestock health service delivery in the Ghibe Valley, Ethiopia
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Livestock Research Institute (ILRI).
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The purpose of this project is to strengthen local capacity for innovation in animal health systems in Ghibe Valley, Ethiopia. The project employs action research using asset-based community development (ABCD) and innovation systems (IS) approaches to derive lessons on (1) how to bring about sustainable improvements in livestock health service delivery in the project site and (2) how to translate improved livestock health into increased productivity and incomes.

CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: RanjithaPuskur •• Links: http://www.ilri.org/node/39 http://mahider.ilri.org/handle/10568/1524/browse?type=dateissued&submit_browse=Browse%20by%20Issue%20Date

14. **International Maize and Wheat Improvement Center (CIMMYT)**

110. PROJECT TITLE:
Cereal Systems Initiative for South Asia (CSISA)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Maize and Wheat Improvement Center (CIMMYT) as lead, IFPRI, ILRI, IRRI, aWHERE, Digital Green
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• CSISA provides an overall strategy and a new umbrella for contributing new science and technologies to accelerating short- and long-term cereal production growth in South Asia's most important grain baskets. Through creating and facilitating innovative public-private sector partnerships in key 'hubs', (i.e. a geographic location that serves as a focal point for innovation in a target region) the project boosts the deployment of existing varieties, hybrids, crop management technologies, and market information. Each hub has a centralized location that serves as the point for research, innovation, extension, and participatory technology adaptation in the target region.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Website: https://sites.google.com/site/csisaportal/Home

111. PROJECT TITLE:
Hub Communication Platform (HCP)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• CSISA

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• HCP is an information sharing and communication platform for linking farmers, agri-service businesses, the public-private sector, the scientific community and outside CSISA stakeholders. The vision of the HCP is to serve as a multi-directional, location based, information sharing system in support of accelerating the impact of agricultural investments across the region.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Website: https://sites.google.com/site/csisaportal/awhere-platform

112. PROJECT TITLE:
<p align="center">Sustainable Intensification of Maize-Legume Systems for Food Security in Eastern and Southern Africa (SIMLESA)</p>
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Maize and Wheat Improvement Center (CIMMYT), ICRISAT, ASARECA, QAAFI-UQ, Murdoch University, ARC, ACIAR and national agricultural systems in Ethiopia, Kenya, Malawi, Mozambique, and Tanzania
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Through participatory research and development with farmers, extension agencies, non-governmental organizations, universities, and agribusinesses along the value chain, the program aims to improve maize and legume productivity by 30% and to reduce the expected downside yield risk by 30% on approximately 500,000 farms within ten years. The focal countries of program research are Ethiopia, Kenya, Malawi, Mozambique, South Africa, Tanzania, Uganda, Zimbabwe, and Australia. Australia could benefit from the drought tolerant and disease resistant maize germplasm developed by CIMMYT for Africa. Africa could, in turn, benefit from advanced GxE analysis techniques applied by Australian breeders which could also initiate more systematic germplasm exchange between CIMMYT and Australia.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Mulugetta Mekuria CIMMYT Agricultural Economist (m.mekuria@cgiar.org) •• Links: http://simlesa.cimmyt.org/

113. PROJECT TITLE:
MasAgro
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • CIMMYT and partners
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Fostering of agricultural innovation systems in Mexico
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Karen Garcia, (k.garcia@cgiar.org); Jon Hellin, Senior Scientist CIMMYT, (j.hellin@cgiar.org) • Link:

15. International Potato Center (CIP)

114. PROJECT TITLE:
Participatory Market Chain Approach (PMCA)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)through Papa Andina
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • PMCA was created from the application of RAAKS (Rapid Appraisal of Agricultural Knowledge Systems) in the context of a market chain, using this action research method to discuss and resolve specific sectoral problems with a range of different stakeholders. It is a new approach to link small-scale farmers to markets. A user's guide for its application was thereafter created.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: cip@cgiar.org • Links: http://cipotato.org/publications/pdf/003296.pdf http://www.cipotato.org

115. PROJECT TITLE:
Papa Andina
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Papa Andina is a network that coordinated actions with a broad network of public and private partners in Bolivia, Ecuador and Peru. One of its main objectives was to promote innovation systems for poor farmers to improve their food security, facilitate market access and reduce poverty. It develops, uses and promotes participatory methodologies in fostering pro-poor innovation in market chains in order to improve food security and market access for small farmers. In the process, it links research and development organizations, the business sector, the national public authorities and local farmers, to generate collective action to respond to the needs of smallholders.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Jorge Luis Alonso G. (jorgealonso@redepapa.org), Bolivia: Abel Rojas (a.rojas@cgiar.org), Ecuador: Andre Devaux(a.devaux@cgiar.org) Peru: Miguel Ordinola (cip-incopa@cgiar.org) •• Links: http://www.papandina.org/ http://cipotato.org/research/potato-in-highlands http://cipotato.org/publications/pdf/005450.pdf http://cipotato.org/resources/publications/book/innovation-for-development-the-papa-andina-experience?set_language=es&cl=es

116. PROJECT TITLE:
The Pro-Poor Research and Development model
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Potato Center (CIP)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The model is designed to generate a more focused research agenda by targeting areas for potential high impact, identifying needs and opportunities, and recognizing the need for flexibility to take projects to scale, measure their impacts, and adjust their lessons to research projects and priorities. It also incorporates analyses of impact pathways to better understand how research outputs are taken up (or not) and how they are (or should be) used to promote positive results. Its five stages, organized in a continuous cycle with each step informing the development of the next one, include Targeting, Needs and opportunities assessment, Research, Scaling out, and Impact assessment.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Links: http://cipotato.org/research/pro-poor-research-development

117. PROJECT TITLE:
Global Initiative on Late Blight (GILB)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The GILB is a worldwide concerted response to potato late blight, the most devastating disease that threatens potato crops worldwide. GILB is a network of researchers, technology developers and agricultural knowledge agents that serves as a platform to exchange ideas and opinions, and facilitates communication and access to information. Although GILB incorporates partners worldwide, its primary aim is to improve management of late blight in developing countries. (The use of FFS at certain stages of this research has been noted.)
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Links: https://research.cip.cgiar.org/confluence/display/GILBWEB/Home

118. PROJECT TITLE:
Multistakeholder Platforms (Plataformas de Concertación)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)

PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The Plataformas are alliances between farmers and suppliers of agricultural services, including research institutes, NGOs, universities, and local governments that facilitate key knowledge-sharing and learning events. It also link smallholders' organizations to higher value markets for their products, such as local fast food restaurants and a company that produces potato chips. An important component of the Plataformas are the trainings in the Farmer Field Schools (FFS).
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: RominaCavatassi (romina.cavatassi@fao.org) , MarioGonzález-Flores (Inter-American DevelopmentBank), PaulWinters (American University, Washington), Jorge Andrade-Piedra (PapaAndina PartnershipProgram, International Potato Center), Patricio Espinosa (CIP),and Graham Thiele (CIP) • Links: http://cipotato.org/publications/pdf/005330.pdf

119. PROJECT TITLE:
Farmer business schools
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • Farmer business schools help enhance farmer capacity to participate in and benefit from agricultural market chains. It builds on the group-based experiential learning mode of farmer field schools, while shifting from a production- to a marketing-oriented curricular framework. Elements of training include such activities as conducting market assessment SWOT (strengths, weaknesses, opportunities, threats) analysis, identifying and launching new products and packaging, analyzing profit margins, and preparing a business plan. Participants meet with market chain stakeholders, such as traders and supermarket industry representatives, during the course of the program. With much more honed business skills, they “graduate” from the farmer business school with a new product (or products), a business plan, and experience implementing their business plan.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Links: http://cipotato.org/research/potato-in-lowlands/farmer-business-schools

120. PROJECT TITLE:
Sweetpotato for Profit and Health Initiative (SPHI)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The project seeks to reduce child malnutrition and improve smallholder incomes through the effective production and expanded use of sweetpotato. It aims to build consumer awareness of sweetpotato's nutritional benefits, diversify its use, and increase market opportunities, especially in expanding urban markets of Sub-Saharan Africa. It involves the establishment of technical support platforms based in leading national programs in Uganda, Mozambique, and Ghana that serve as resource and training centers for both research and development of stakeholders and to establish a sweetpotato community of practice.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Links: http://cipotato.org/research/partnerships-and-special-projects/sasha-program http://sweetpotatoknowledge.org/sweetpotato-introduction/overview/sweetpotato-for-profit-and-health-initiative

121. PROJECT TITLE:
Ruta Condor (route of the condor)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • The project aimed at restoring and conserving the genetic diversity of native potatoes in situ – high in the Andes, where the crops originated. Scientists, farmers, and local partners repatriated over 4,600 samples of more than 1,200 varieties of native potato in 41 locations, following the ancient north south pre-Columbian route which unified the Inca Empire. Cultivation of various varieties by numerous families is done using the 'potato park' model.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Links: http://cipotato.org/genebank/ruta-condor

122. PROJECT TITLE:
Potato Park
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• The Potato Park, located in PISAQ in the Sacred Valley of Peru, is one of the few in-situ conservation initiatives in the world where the local people are managing and protecting local genetic resources and traditional knowledge about their health, food, and agriculture. About 600 varieties of native potatoes grow in the Park, most of them unique to this habitat. Six Quechua communities live in the Park.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Links: http://cipotato.org/genebank/potato-park

123. PROJECT TITLE:
Potato Park
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> •• International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Farmer field schools is used as an approach to managing pests and diseases. It center around a 'living laboratory' where farmers are trained to identify insects and diseases and compare results on two subplots – one using conventional chemical pest control and the other using IPM. On the improved management plot, participants strive to improve ecosystem health by cutting pesticide use while increasing productivity through intensified management. Farmers experiment with a variety of techniques, such as weevil traps, different strains of potatoes, and targeted applications of lower toxicity pesticides.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Links: http://cipotato.org/research/crop-management-production-systems/global-control-principles-and-strategies-for-potato-and-sweetpotato-pests-and-diseases/ farmer-field-schools

124. PROJECT TITLE:
Users' Perspectives with Agricultural Research and Development (UPWARD)
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • UPWARD is an Asian network of scientists and development specialists linking users and R&D professionals together for more effective agricultural innovation. It seeks to link users and R&D professionals for more effective agricultural innovation; bring sustained benefits to less favored farming areas and marginalized groups, especially women; and work with households and local communities as key actors in research and learning activities. As a Partnership Program of CIP, it serves as platform for adapting and scaling up technological innovations developed by CIP research.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Contact: Dindo M. Campilan, UPWARD Program Leader, (cip-manila@cgiar.org), Ir. Antine Hardon, UPWARD Wageningen Secretariat (Antine.Hardon@wur.nl) • Links: http://www.cip-upward.org/main/CMS_Page.asp?PageID=1 http://www.cipotato.org/library/pdfdocs/SW37684.pdf

125. PROJECT TITLE:
Gender tool to promote women's innovation
IMPLEMENTING ORGANIZATIONS:
<ul style="list-style-type: none"> • International Potato Center (CIP)- Papa Andina, PROINPA (Bolivia), INIAP (Ecuador), and INCOPI (Peru)
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> • CIP-Papa Andina has developed a tool to more fully integrate gender and women's participation in innovation-promoting methodologies. The tool is comprised of guidelines with practical recommendations for mainstreaming gender into innovation promoting methodologies, thus converting strategy into practice. The tool is aimed at promoting equal benefits for men and women from pro-poor innovations.
CONTACT INFORMATION:
<ul style="list-style-type: none"> • Links: http://cipotato.org/research/gender/innovating-women

126. PROJECT TITLE:
Participatory approaches for pro-poor value chain development
IMPLEMENTING ORGANIZATIONS:
•• CIP
PROJECT DESCRIPTION:
•• Sustainable value chains by balancing economic, ecological and social benefits among actors and stakeholders.
CONTACT INFORMATION:
•• Contact: Andre Devaux (a.devaux@cgiar.org); DindoCampilan(d.campilan@cgiar.org)
•• Links:

16. Center-wide programs

127. PROJECT TITLE:
Share Fairs
IMPLEMENTING ORGANIZATIONS:
•• ICT-KM Program of CGIAR
PROJECT DESCRIPTION:
•• These are interactive events that employ various knowledge sharing formats such as market stalls and booths, and workshops and presentations designed to encourage discussions.
CONTACT INFORMATION:
•• Contact:
•• Link: http://ictkm.cgiar.org/what-we-do/share-fair/ http://www.sharefair.net/en/

128. PROJECT TITLE:
Gender Network
IMPLEMENTING ORGANIZATIONS:
PROJECT DESCRIPTION:
<ul style="list-style-type: none"> •• Has been recently established to share information among the gender focal persons at the different CGs.
CONTACT INFORMATION:
<ul style="list-style-type: none"> •• Contact: Dr. Jacqueline Ashby, Senior Gender Advisor for the CG's (j.ashby@cgiar.org); Kathleen Earl Colverson, Senior Social Scientist, Team Leader – Poverty, Gender and Impact , International Livestock Research Institute (ILRI), (k.colverson@cgiar.org) •• Link:

Appendix 6: List of individuals contacted (Personal correspondence)

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28.	Pratap Shrestha	pshrestha@usc-asia.org
29.	Ruth Meinzen-Dick	r.meinzen-dick@cgiar.org
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31.	Thelma Paris	t.paris@irri.org
32.	Tonya Schuetz	t.schuetz@cgiar.org
33.	Zoumana Bamba	z.bamba@cgiar.org



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