Capturing farmers' demands and involving them in research

RIU

Validated RNRRS Output.

A new menu of methods now helps farmers and researchers work together more productively. Farmers want and need change. So finding out what they want isn't a one-off process, it's continuous. And, like everyone else, there are things out there that farmers don't know about, so they don't know whether or not they might need them. Then, when suggestions are made to meet their needs, they like to be involved in testing them out. Development agencies, research organisations, foundations and non-government organisations already use the methods. Teamwork between researchers and farmers relies on social principles. These principles work as well with new equipment for draught animals as with integrated pest management, whether the topic is potato, rabbits or rice.

Project Ref: **CPP58:**
Topic: **7. Spreading the Word: Knowledge Management & Dissemination**
Lead Organisation: **International Potato Centre (CIP), Peru**
Source: **Crop Protection Programme**

Document Contents:

Description

Research into Use
NR International
Park House
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ME20 6SN
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Geographical regions included:

Bolivia, Ecuador, Peru,

Target Audiences for this content:

Crop farmers, Livestock farmers, Fishers, Forest-dependent poor, Processors, Traders, Consumers,

CPP58

A. Description of the research output(s)

1. Working title of output or cluster of outputs.
In addition, you are free to suggest a shorter more imaginative working title/acronym of 20 words or less.

Methods for linking the supply of technology with the demand from smallholder farmers (previous working title "Strengthening Technical Innovation in Potato-Based Agriculture")

2. Name of relevant RNRRS Programme(s) commissioning supporting research and also indicate other funding sources, if applicable.

The Crop Protection Programme, Crop Post Harvest Programme, the Livestock Production Programme and DFID's Rural Livelihood Department (Bolivia Initiative) commissioned research through the Innova project in Bolivia. Work on participatory methodologies for project development and implementation were jointly developed with the DFID RLD funded FOCAM project ("Participatory monitoring and evaluation (PM&E) for rural innovation in Bolivia.").

3. Provide relevant R numbers (and/or programme development/dissemination reference numbers covering supporting research) along with the institutional partners (with individual contact persons (if appropriate)) involved in the project activities. As with the question above, this is primarily to allow for the legacy of the RNRRS to be acknowledged during the RIUP activities.

R 8182 (ZA 0501)
Partners: Antonio Gandarillas, Foundation for the Promotion and Research of Andean Products (Proinpa), Bolivia; Gustavo Pereyra, Centre for Research in Tropical Agriculture (CIAT), Bolivia; Juan Villarroel, San Simón University (UMSS), Bolivia, SIBTA (Bolivian System for Agricultural Technology).

4. Describe the RNRRS output or cluster of outputs being proposed and when was it produced? ***(max. 400 words)****. This requires a clear and concise description of the output(s) and the problem the output(s) aimed to address. Please incorporate and highlight (in bold) key words that would/could be used to select your output when held in a database.*

SIBTA was to make adaptive research and technical assistance respond more clearly to demands from farmers and other actors. Previous RNRRS projects in Bolivia had developed a range of promising technologies. Some policy makers wanted to throw out this technology and start again from scratch, in order to be "demand-led". Innova was a chance to see if the existing technology really did meet demand, and if so, finish it up with poor farmers.

Innova coined the idea of explicit and implicit demand. Explicit demands are ones that people recognise and can express loud and clear ("We need more grass for our sheep in the dry season"). Implicit demands are for problems that the end users do not recognise (e.g. potato viruses), or for techniques which they have not imagined (for example, they did not demand metal ploughs until they saw them).

Innova developed a menu of methods to **capture farmer demands for technology and improve their supply (research)**

- Demand sondeos. Quick surveys of the local farm economy, by a multidisciplinary team, to capture explicit demands, and construct hypotheses about the implicit demands. Conclusions are validated with a community meeting.
- Technology fairs. Farmers visit field trials and see technologies presented in stands at a technology field day. Farmer-experimenters explain the trials and stands to interested neighbours. Project staff use voting methods or short questionnaires to gauge the audience's response to the technologies.
- Back-&-Forth. Researchers take a tool (e.g. a plough) to the field and encourage farmers to test it and critique it. The tool goes back and forth from the field to machine shop until the farmers approve it.
- CIALs and community feedback. Groups of farmers conduct trials, present results to their community and suggest improvements that often make the difference between success and failure of a technology.
- "Committees with teeth". A municipal committee of farmers judged local research, encourage promising lines. These were informally named "committees with teeth" as the idea was that they have real power to influence resource allocation. These committees are likely to work best if they can be linked with local government (municipal) structures.

INNOVA also developed a suite of methods for engaging farmers in the **project cycle** and ensuring that their demands were met. These included:

- Participatory preparation of project proposals
- Participatory mid-term reviews
- Participatory project adjustments.

When: April 2002 – March 2005, plus an extension phase, April 2005 – January 2006.

5. What is the type of output(s) being described here?
Please tick one or more of the following options.

Product	***Technology***	***Service***	***Process or Methodology***	***Policy***	***Other Please specify***
			X		

6. What is the main commodity (ies) upon which the output(s) focussed? Could this output be applied to other commodities, if so, please comment

Potato, but including many other crops in the system (various Andean roots and tubers, several grains, quinoa, broad beans), and several fodder species (vetch, oats, phalaris and other grasses).

The outputs can be applied to any commodity, because the methods for harnessing research to farmer demands can be used with any crop or product, as can the marketing methods.

7. What production system(s) does/could the output(s) focus upon?
Please tick one or more of the following options. Leave blank if not applicable

The menu of methods developed could be applied to any production system.

Semi-Arid	***High potential***	***Hillsides***	***Forest-Agriculture***	***Peri-urban***	***Land water***	***Tropical moist forest***	***Cross-cutting***

8. What farming system(s) does the output(s) focus upon?
Please tick one or more of the following options (see Annex B for definitions).
Leave blank if not applicable

The menu of methods developed could be applied to any farming system.

Smallholder rainfed humid	***Irrigated***	***Wetland rice based***	***Smallholder rainfed highland***	***Smallholder rainfed dry/cold***	***Dualistic***	***Coastal artisanal fishing***

*9. How could value be added to the output or additional constraints faced by poor people addressed by clustering this output with research outputs from other sources (RNRRS and non RNRRS)? (**max. 300 words**).*

Please specify what other outputs your output(s) could be clustered. At this point you should make reference to the circulated list of RNRRS outputs for which proformas are currently being prepared.

Value could be added to the Innova methods by clustering them with any of the RNRRS outputs included in the circulated list. Research to alleviate poverty must respond to local demand. Innova found that demand is not a tangible object to find and pass on to researchers. Rather, demand must be measured often as it evolves, while pro-poor technology is designed and fine-tuned over time. The principles for joining researchers and farmers together as a team are social, not agronomic, and they work as well with new draught-animal equipment as with IPM, whether the topic is potato, rabbits or rice.

The suite of methods for capturing demand could be integrated with approaches for participatory on-farm research by ensuring that technologies being researched are clearly articulated with farmers' demands. Around the world, many national agricultural innovation systems face a similar problem of how to assess farmer demand, articulate it with the supply of available technology, and stimulate shifts in both demand and supply to promote broad adoption of appropriate technology.

The suite of methods for including users in the project cycle could be appropriate for any decentralised adaptive research and extension system that seek to give users a real voice in controlling the content and quality of service delivery.

Validation

B. Validation of the research output(s)

*10. **How** were the output(s) validated and **who** validated them?*

*Please provide brief description of method(s) used and consider application, replication, adaptation and/or adoption in the context of any partner organisation and user groups involved. In addressing the "who" component detail which group(s) did the validation e.g. end users, intermediary organisation, government department, aid organisation, private company etc... This section should also be used to detail, if applicable, to which social group, gender, income category the validation was applied and any increases in productivity observed during validation **(max. 500 words)**.*

Each of the menu of methods developed by INNOVA to capture farmer demands for technology and improve their supply (research) was tested on at least three occasions in different production systems (Table 1).

Table 1: Validation of the menu ofmethods to capture farmer demands

Method	Used to:	Production system / farming system	Date:
Demand Sondeos	Recover farmers' explicit demands and assess the correspondence with the technologies promoted by INNOVA partners.	Smallholder rain fed highland called "Interandinos Valley"	Nov. 2002
		Dry and cold highland called "Altiplano"	Jan. 2003
		Smallholder rain fed medium high valleys	Nov. 2002
Stratified Demand sondeos	Capture farmers´ explicit demands by socio-economic strata	Interandinos Valley	Mar. 2004
		Altiplano	Dec, 2004
		Smallholder rain fed medium high valleys	Feb, 2004
Technological fairs	Extend the results of the validation of technologies offered by INNOVA partners and to assess the possibilities for wider promotion.	Interandinos Valley	April, 2002
			Mar, 2004
			April, 2005
		Altiplano	Mar, 2003
			Mar, 2005
		Smallholder rain fed medium high valleys	Mar, 2003
			Jul, 2004
			Aug, 2005
Community feedback days	To share with local authorities, other community members and technicians the preliminary results of the field work, in order to adjust the research agenda for the next season.	Interandinos Valley	Jul, 2003
			Aug, 2003
			Sep, 2003
			May, 2004
			Jun, 2004
		Altiplano	Sep, 2003
			Sep, 2004
		Smallholder rain fed medium high valleys	Jul, 2003

The use of the menu of methods led to a series of changes in the technologies that were being tested by the project (Table 2). This led to changes in the technology, and in the case of three of the technologies to widespread adoption. This validated the methods as effective instruments for promoting innovation processes of

technological adaptation and adoption.

Table 2. Changes in technologies due the application of the menu of methods to capture farmer demands.

Technology	*Changes in the technologies through the use of the methods*	*Widespread adoption in Innova pilot areas*
Improved fallow	Adopted as forage, not as improved fallow	Yes
Grains-plus-legumes	Farmers like it, if they can produce vetch seed	Yes
Phalaris grass	Planted for fodder, not for soil conservation	No
Application methods of herbicide for purple nut sedge	abandoned	Abandoned by researchers in response to farmers
Improved tillage, and sale of implements	Invented high tillage, and a new plough to do it with. Extended implements, invented the multiple mountain plough	Yes , with demand in other areas
Home remedies for cows	Abandoned	Abandoned by researchers in response to farmers

The suite of methods to systematically involve farmers in the project cycle were tested on numerous occasions between 2005-6 (Table 3).

Table 3: Validation of the suite of methods to engage farmers in the project cycle (during the period from 2005 to 2006)

Method	**Used to:**	**Production system / farming system**	**Change suggested by user**	**User**	**Commodity and location**
Participatory mid-term review (PMR)	Participatory method that makes it possible to measure progress of a project from the farmers' perspective and their degree of satisfaction with the outcomes. It generates useful information to adjust the actions of the project to achieve its overall objective	Semi arid region and smallholder rain fed lowland called "Chaco"	None	Agrocinti cosea ltda. Agro XXI	– Groundnut, O'Connor, Tarija. Bolivia – Cattle, Villa Montes, Tarija. Bolivia – Cattle, Cordillera, Santa Cruz. Bolivia – Cattle, Cattle Owners' Federation of the Chaco. Bolivia
		Smallholder rain fed highland called "Inter Andean Valley"	2 changes suggested [A, B]	Cedes	– Onion, Punata, Cochabamba. Bolivia
		Dry and cold highland called "Altiplano"		Wiñay	– Organic quinoa Caracollo, Oruro. Bolivia
Participatory	A methodology to adjust, improve and modify the outputs, activities and indicators of a project prior to start up, taking into consideration the	Dry and cold highland called "Altiplano"	None	Prosuko – marketing	– Potato, Tihuanaco, La Paz. Bolivia

adjustment of proposals (PAP)	perspective of farmers and service providers..	Smallholder rain fed highland called “Inter Andean Valley”	None	Ciaprot	– Groundnut. Cochabamba Bolivia
		Smallholder rain fed highland	None	Innovandes project’ C	– Potato, Ecuador
		Smallholder rain fed highland	None	Innovandes project’ C	– Potato, Perú

A Evaluate knowledge and practices acquired by demanders during the project

B Evaluate the performance of the provider and of the user organization from the perspective of the demanders

C New regional project coordinated by CIP/ Papa Andina Initiative and supported by New Zealand Aid.

The suite of methods to engage farmers in the project cycle were designed and tested for use with SIBTA’s adaptive research and technical assistance projects but they could be used more generally with any type of project for technological innovation.

The Innova methods have been described in a catalogue for Bolivian policy makers, published by the Ministry of Farmer Affairs, Agriculture and Livestock (Patiño, Fernando, Rolando Oros & Graham Thiele 2006 *Inventario de Metodologías para el Diseño e implementación de Proyectos Guiados por la Demanda*).

Proinpa decided to include the methods across the whole research organization and invited staff members who work with Innova to give a course on the methods to project managers. The manager of a project, implemented with 16 communities on the Altiplano, made the following comments about the methods:

The elaboration of demands let us get to know farmers’ real problems while writing a proposal, and to change some implicit demands into explicit ones.

The technology fair showed the technologies offered by the project and by Innova partners. During the technology fair, questionnaires were given to about 100 farmers, to see how they perceived the technologies. This helped to rank the new technologies and learn local criteria. This method adds value to what would otherwise be just a field day.

A mid term review was done at two levels: first with the leaders of the 16 communities that work with the project, and then with each community. The method takes time, but the farmers were able to use it to evaluate the project, prioritise interesting topics and propose others to include in the future. They pointed out shortcomings in the training and made a self-criticism about their own attitude in the courses. This information helped adjust the project.

*11. **Where and when** have the output(s) been validated?*

*Please indicate the places(s) and country(ies), any particular social group targeted and also indicate in which production system and farming system, using the options provided in questions 7 and 8 respectively, above **(max 300 words)**.*

See Tables 1, 2 and 3, in question 10.

Current Situation

C. Current situation

*12. **How and by whom** are the outputs currently being used? Please give a brief description **(max. 250 words**).*

The methods to fit research with farmers' demand for technology and the methods to engage farmers into the project cycle are being used by Proinpa, CIAT/Santa Cruz, the Chaco Foundation, the Valley Foundation, and various other services providers. A range of service providers have been given training to apply the methods (Table 4).

Table 4. Organization and number of people with basic capacities to apply the methods to engage farmers in project cycle

Type of organization	Organization and number of people with basic capacities to apply de methods	Type of project where they could apply the methods
Service providers	Agrisec , Ors, Cedes (3), Ciaprot (2) Cidas, Cigac , Prolade, Dae, Anapo, Fan/Bolivia, Cedica, Descon, Asovech, Cvct, Eurogenetica, Fundes/ Bolivia, Proteca, Incas srl, Fbe, Cittca, Prodem (2), Prosuko-Markting, Wiñay (2), Consultora Rural (2)	– Extension type
Universities	Fca y p (3), Eupg (3), Agruco, Mejocuy, Esfor, Cif (3), Ceia, Cadia, Posgrado (2), Prolade, Cifema, Rrnn	– Training type – Extension type
Innova partners	Prommasel (3), Prometa (2), Ciat (11), Proinpa (22)	– Research type – Extension type
Local government	Sub-prefecture of the Gran Chaco (4), Municipal Council of Comarapa (2)	– Formulation and evaluation of projects implemented within their areas of action by other service suppliers
Others	Preservar, Pdar, Kurmi, Private small scale enterprises (5)	
Grand total	50 organizations or groups and 110 people with basic capacities	

*13. **Where** are the outputs currently being used? As with Question 11 please indicate place(s) and countries where the outputs are being used **(max. 250 words).***

See Table 4, in Question 12.

*14. What is the scale of current use? Indicating how quickly use was established and whether usage is still spreading **(max 250 words).***

The SIBTA Foundations use the methods. The Valley and Altiplano Foundations of SIBTA suggested combining elements of their own monitoring and evaluation system with the participatory mid-term review method.

More progress was made with the Chaco FDTA. The participatory mid – term review, is now incorporated in the Chaco Foundation's evaluation system, and is used by the Foundation's supervisors, and services providers which manage its adaptive research and extension projects.

The Altiplano Foundation did not suggest any changes in the Participatory Proposal Adjustment method. They consider it to be potentially very valuable, have begun testing it and are waiting to see how useful it is.

In the Valleys Foundation a service provider wants to try the Participatory Proposal Adjustment.

The ***Proinpa Foundation decided to institutionalize the methods***, and promote their use in its monitoring and evaluation system.

See also Table 4 in Question 12.

At the moment because of the change of government in Bolivia, instutionalization of the methods has slowed as the new government establishes its own policies for agricultural R&D. The INIS project which is about to start will provide new momentum for further institutionalization.

15. In your experience what programmes, platforms, policy, institutional structures exist that have assisted with the promotion and/or adoption of the output(s) proposed here and in terms of capacity strengthening what do you see as the key facts of success? ***(max 350 words).***

The menu of methods for capturing farmer demand was used to by the project to identify farmers' demands and improve congruence with available supply. Further institutionalization of the methods in SIBTA was inhibited because SIBTAs Foundations engage in little longer term research with a broad range of technologies that could have provided an appropriate context for the application of the methods to assess farmer demand. A demand led innovation system with strong investment in long term research would provide an appropriate context for institutionalizing the methods.

The suite of methods for engaging farmers in the project cycle would be assisted by a context in which technical assistance and local adaptive research is provided through competitive funded projects and where users are given a real role in monitoring the quality of service delivery.

Current Promotion

D. Current promotion/uptake pathways

16. ***Where*** *is promotion currently taking place? Please indicate for each country specified detail what promotion is taking place, by whom and indicate the scale of current promotion* ***(max 200 words).***

The technologies themselves continue to spread spontaneously, at least in the municipalities where the

technologies were validated.

Building on the experience of INNOVA, the FOCAM project and FIT Programme, DFID is funding the INIS project (National Agricultural Innovation Systems that Work for the Poor) implemented through CIAT and CIP in Bolivia, Peru, Ecuador and Colombia. INIS will promote the institutionalization of these and other participatory methods in the four countries, measure the impact of the methods and , through the provision of evidence based information, influence policy to promote broader incorporation of participatory approaches and tools in national innovation systems.

17. What are the current barriers preventing or slowing the adoption of the output(s)? Cover here institutional issues, those relating to policy, marketing, infrastructure, social exclusion etc. ***(max 200 words)****.*

Bolivia is a vast country, with a sparse population, where roads are long and patchy. Issues of social exclusion have made world headlines, and there have been four presidents in three years. If the Innova methods worked in Bolivia, there is a good chance they will work elsewhere. The Innova methods help to overcome social exclusion, as the poor, women and indigenous people were able to join in.

Having said this, the Innova methods have not been applied more in Bolivia because SIBTA actually does very little research. SIBTA mostly funds small extension projects, which have little contact with each other or with other institutions. And even though the SIBTA projects do emphasise extension, because they are so fragmented (a table grape project here, an onion project there), there is little flow of new technology through the system. There is no national extension service. There are centres of competence scattered around the country, but they tend to be fairly small and with a narrow remit; for example one agency produces high quality forage seed, but does not have an extension service. Several NGOs have excellent extension agents, but do no research. This piecemeal situation still hampers the spread of ideas.

18. What changes are needed to remove/reduce these barriers to adoption? This section could be used to identify perceived capacity related issues ***(max 200 words).***

Policy change leading to a much more substantial investment in agricultural research in a demand led context would be the most important change needed to reduce barriers to adoptions. In addition, organizations that are potential users of the methods need to be trained (capacity building).

Manuals and other users' guides need to be adapted for new situations, edited and translated. Study visits and other exchange of experiences will also be useful to promote spillover of the methods into neighbouring countries and into new geographical contexts.

19. What lessons have you learnt about the best ways to get the outputs used by the largest number of poor people? ***(max 300 words).***

The methods are intended to be used by R&D organizations rather than the poor directly.

Impacts On Poverty

E. Impacts on poverty to date

20. Where have impact studies on poverty in relation to this output or cluster of outputs taken place? This should include any formal poverty impact studies (and it is appreciated that these will not be commonplace) and any less formal studies including any poverty mapping-type or monitoring work which allow for some analysis on impact on poverty to be made. Details of any cost-benefit analyses may also be detailed at this point. Please list studies here.

Bentley, Jeffery W. 2005a Technology Fair in Qhochimit'a: Desperate to Experiment. Cochabamba: Innova Project report.

Bentley, Jeffery W. 2005b Technology Fair in Kellhuiri: "What They Learned in Seven Years, We Learned in a Week": Cochabamba: Innova Project report.

Bentley, Jeffery W., Graham Thiele, Rolando Oros & Claudio Velasco 2004 "Cinderella's Slipper: Sondeo Surveys and Technology Fairs for Gauging Demand." London: ODI Agricultural Research & Extension Network (AgREN). Network Paper No. 138.

Bentley, J.W., R. Botello, A. Devaux, A. Guidi, D. Horton, P. Meneces, F. Rodríguez, G. Thiele, C. Velasco, M. Webb & B. Siderman-Wolter 2005 Innovating for Prosperity: Bolivia's Innova project. Cochabamba: Innova. 16 pp.

Bentley, Jeffery W., Graham Thiele, Claudio Velasco, André Devaux, Morag Webb, Félix Rodríguez, Rolando Oros & Rubén Botello. In press. "Unspoken Demands for Farm Technology." Submitted to the *International Journal of Agricultural Sustainability.*

Devaux, André 2005 Strengthening Technical Innovation Systems in Potato-Based Agriculture in Bolivia (Innova). Final Technical Report. Lima: CIP.

Devaux, André 2006 Project Innova (Extension Phase). Final Technical Report. Lima: CIP.

Focam 2005a Evaluación Participativa Final del Modelo Innova de PITA Mejoramiento en la Calidad de Papa para la Industria y Consumo en la Provincia Manuel María Caballero, Departamento de Santa Cruz. Cochabamba: Focam.

Focam 2005b Evaluación Participativa Final del Modelo Innova de PITA Mejoramiento en la Producción de Forrajes para la Alimentación Animal en la Provincia de Tiraque. Cochabamba: Focam.

Siderman-Wolter, Benedikte (ed.) 2005 *Did You Know? A Focus on 17 Natural Resources Projects Across the Developing World, Managed by NR International.* Aylesford, Kent, UK. 44 pp.

21. Based on the evidence in the studies listed above, for each country detail how the poor have benefited from the application and/or adoption of the output(s) ***(max. 500 words):***

- *What positive impacts on livelihoods have been recorded and over what time period have these impacts been observed? These impacts should be recorded against the capital assets (human, social, natural, physical*

and, financial) of the livelihoods framework;

- *For whom i.e. which type of person (gender, poverty group (see glossary for definitions) has there been a positive impact;*
- *Indicate the number of people who have realised a positive impact on their livelihood;*
- *Using whatever appropriate indicator was used detail what was the average percentage increase recorded*

In the first Focam study (2005a) 19 farmers representing seven communities evaluated their experience with Innova in Comarapa, Santa Cruz. Using the Focam method of participatory project evaluation, the farmers gave the project a satisfaction rating of 85%. Farmers liked the project because it was participatory and they also valued their new organisations. All of the communities now had CIALs and one was organised to grow certified seed potato.

In the second study (Focam 2005b) 28 farmers representing five communities in Tiraque, Cochabamba gave Innova a slightly lower rating, 73%. They liked the project most because of what they learned from it. Some of them were pleased that they were now producing, and even selling, the seed of new fodder varieties. All 28 farmer-evaluators said they had learned to produce new oat varieties, and most had learned to grow other forages, but they also complained that they had not learned more, or not produced more forage because the farmers themselves did not show enough interest in the project at first, and because there had not been enough seed available.

There was a dramatic improvement in Innova's technologies between 2003 and 2005. During the technology fairs in 2003, the plots were broken into small, random blocks: perfect for gathering statistically-valid data, but difficult for farmers to see. Some of the trials were barely growing at all, and occasionally the agronomists hovered over the farmer-experimenters like ventriloquists. By 2005, all of the experiments were described in indigenous languages (Aymara or Quechua) by extremely confident farmer-experimenters. And although there were slightly fewer technologies, all of the trials were thriving, and the treatments were large enough for the audience to immediately grasp the differences between them. On the Altiplano, visiting farmers were astounded by the bright green patches of barley mixed with vetch, and everyone could see that the 'improved potato' (a native variety, planted with an ox plough and fertilised with chicken manure) would yield twice as much as the other fields. At the trial in the high valleys, after showing and explaining their successful trials, the farmer-experimenters handed out 50 gram packets of seed. The other farmers rushed in to snatch up the little bags of seed, so they could try the new crops and varieties on their own land (Bentley (2005a, 2005b). The technologically conservative peasant is a myth. Smallholders are keen to try innovations that look promising. The problem with research in the past has been that much of the innovations are too expensive, take too much labour, or simply do not work on farms. For overviews of Innova see (Bentley et al. 2005, 2005, Devaux 2005, 2006, Siderman-Wolter 2005).

Environmental Impact

H. Environmental impact

24. What are the direct and indirect environmental benefits related to the output(s) and their outcome(s)? ***(max 300***

words)

This could include direct benefits from the application of the technology or policy action with local governments or multinational agencies to create environmentally sound policies or programmes. Any supporting and appropriate evidence can be provided in the form of an annex.

The methods are environmentally neutral and would not be expected to have any environmental impacts.

25. Are there any adverse environmental impacts related to the output(s) and their outcome(s)? ***(max 100 words)***

No.

26. Do the outputs increase the capacity of poor people to cope with the effects of climate change, reduce the risks of natural disasters and increase their resilience? ***(max 200 words)***

Yes. Research results that fit the needs of the poor, and which articulate them to research, help make communities more resilient.

Annex

Related document

Click below to view the related information ....

PF_CPP58_Annex.pdf
