Communication for dissemination

RIU

Validated RNRRS Output.

In the East Asia and Pacific region, projects designed to improve the lives of fishers have worked with communicators from the Support to Regional Aquatic Resources Management (STREAM) initiative to ensure that the results of their work reach stakeholders at various levels and get used. This work aimed to overcome barriers to dissemination like culture and language, which vary from area to area. Cycles of production, testing, and revising—all in close consultation with stakeholders—produced a range of materials. Examples include four-page, picture-rich, Better Practice Guides for producers and two-page briefs for policy makers. To ensure their widespread appeal, the materials are available in 12 languages: Bahasa Indonesia, Bengali, Burmese, English, Hindi, Ilonggo, Khmer, Nepali, Oriya, Sinhala, Urdu and Vietnamese.

Project Ref: **NRSP22:**
Topic: **7. Spreading the Word: Knowledge Management & Dissemination**
Lead Organisation: **STREAM, UK**
Source: **Natural Resources Systems Programme**

Document Contents:

Research into Use
NR International
Park House
Bradbourne Lane
Aylesford
Kent
ME20 6SN
UK

Geographical regions included:

Cambodia, India, Indonesia, Nepal, Pakistan, Philippines, Vietnam,

Target Audiences for this content:

Crop farmers, Livestock farmers, Fishers, Forest-dependent poor,

Description

NRSP22

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.

"**Scaling up through communications**"

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

Natural Resources Systems Programme

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.

R8363: Enhancing development impact of process tools piloted in Eastern India In India –Gramin Vikas Trust (GVT), Ranchi. In Sri Lanka – National Aquaculture Development Authority (NAQDA). In the Philippines – Bureau of Fisheries and Aquatic Resources (BFAR). In Indonesia – Directorate General of Aquaculture (DGA). In Lao PDR – Department of Livestock and Fisheries (DLF). In Cambodia – Community Fisheries Development Office (CFDO). In Vietnam – Sustainable Aquaculture for Poverty Alleviation (SAPA) Office, Ministry of Fisheries. In Nepal – Agriculture Information and Communication Centre (AICC), and the Department of Fisheries Development (DOFD)

R8100: Fishers and Farmers in Eastern India; Central Institute for Fisheries Education (CIFE) Dr Ayyappan; Dr S D Tripathi, Independent Advisor, Former Director CIFA/CIFE; NGO Gramin Vikas Trust; STREAM Initiative.

R6759: Fishers and Farmers in Eastern India; Eastern India Rainfed Farming Project; Stirling University; Newcastle University; Reading University.

*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.*

The output "**Scaling up through communications**" was produced in Asia Pacific between 2004-2005 by the NRSP project R8363.

The problem that this output aims to address is that, although research in a specific context may **provide knowledge** and sometimes **tools, processes or technologies** that are also more broadly relevant, **sharing** commonly takes place only in limited (often academic) domains. Consequently **application of research**

products for development often spread little beyond the original location or context. **Culture** and **language** are specific barriers which constrain **sharing between countries**.

The outputs which address this challenge were as follows:

The first output is a process whereby key national level **communications stakeholders** (in this case STREAM Initiative Communications Hub Managers) from the country where the research originated and eight other countries from outside the original project context engaged with research products (in this case of R6759 and R8100) to understand their content and potential for **wider application**.

The second output is a process of **participatory** conception and **development of communications materials** appropriate to key stakeholder groups (derived from a stakeholder analysis). This involved working with Communications Hub Managers, governmental and non-government, development, research and academic staff, partners and collaborators and farmer representatives. The process worked through iterative development cycles of different genres of **media appropriate** to different stakeholders (using **digital discussion fora**, **web-based** "netmeetings" and posting of successive versions of media on a commonly accessed **website**). Colleagues without connection to the internet **including primary stakeholders** in villages (**moderate** and **extremely poor people**) were also linked to the process with the assistance of STREAM Communications Hubs throughout Asia-Pacific acting as intermediates, sharing the tools, and collecting and posting stakeholder feedback on a **Discussion Forum**. Farmers also suggested further BPG titles and several actually wrote these.

The third output was the development of two specific communications genres: a short (4-page), lively, picture local content-rich publication with minimal **simple language** for sharing with primary stakeholders and those who work with them, which became known as a **Better-Practice Guideline** (BPG) and a 2-page concise summary with leads to other materials for senior professions referred to as a **Policy Brief** (PB).

The forth output was the fine-tuning to specific **national communication contexts** and **translation of the meaning** of these documents into other languages, in this case twelve languages (**Bahasa Indonesia, Bengali, English, Hindi, Ilonggo, Khmer, Myanmar, Nepali, Oriya, Sinhala, Urdu** and **Vietnamese**) spoken by stakeholders in eight countries.

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	*X*	*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

The main commodities associated with the original research were fish (and other aquatic resources). However

the commodity is almost irrelevant in this case, as the process or methodology could be applied to other commodities. Participatory development of communications materials and scaling up through communication, represent mechanisms to get research products that are relevant to stakeholder groups from senior professionals to moderate and extremely poor people, and the actions they imply, into policy and service provision domains.

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

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

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

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

*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.

A number of RNRRS project outputs have specifically addressed different communications challenges. Value may be added to the outputs described here by clustering R8363 with other uptake promotion initiatives such as R8381, as well as the experiences of information kiosks in India under R8152, R7359 and R8213.

It would be valuable to link R8363 with the African Universities e-learning consortium and INASP in their PERI programme (Programme for the Enhancement of Research Information), ICRAFs Voices of the Poor initiative and promotion and dissemination activities of ICIPE in Nairobi.

The utility of the R8363 process has already been successfully demonstrated to facilitate implementation of new livelihood options by primary stakeholders through R8334. Clustering with R8363 will add value to the process of developing and sharing knowledge from a wide array of RNRRS and other research within RIUP.

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)**.*

Participatory development of communications materials and scaling up through communication has been proven to be effective or offer efficiencies to beneficiaries, other researchers and advisory providers.

Three Better Practice Guidelines (BPGs) and Policy Briefs (PBs) relating process tools of R6759 and R8100: 'Self Help Groups', 'Consensus-Building Process' and 'Information Access Survey' have been developed in 12 languages (Bahasa Indonesia, Bengali, English, Hindi, Ilonggo, Khmer, Myanmar, Nepali, Oriya, Sinhala, Urdu and Vietnamese) and significantly shared in S E Asia. Strong understanding and uptake of the two new genres of publications was reported by STREAM National Coordinators and Communications Hub Managers from Cambodia, India, Indonesia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka and Vietnam at the STREAM Regional Conference in Hanoi in 2005.

To date a further 25 BPGs and 5 PBs covering topics related to development approaches, policy development and aquaculture development have been publish by farmers, international organisations, inter-governmental organisations and one state government.

The Government of Orissa, Orissa Watersheds Development Mission (OWDM) in eastern India has selected and used both the genres for its watershed management program with support from the DFID Western Orissa Rural Livelihoods Project. A manual relating fish culture in watersheds has been developed as 19 BPGs. Local training of trainers has successfully used BPGs as course materials and many Self-Help Groups are using BPGs available from One-stop Aqua Shops. Several hundred thousand have now been shared as hard and digital copies most are in Oriya. A Policy Brief 'Aquaculture in Watershed Development' has been validated by OWDM and a Policy Brief 'Implementing the new National Fisheries Policy' has been validated by FAO in Pakistan.

Other examples of organisations validating the BPGs include: 'The Improved Management of Small-Scale Cage Culture in Asia', 'Self-recruiting species in farmer managed aquatic systems: importance to rural livelihoods' In English and Vietnamese and 'Local Resource Users' Groups? What are they? In English, Lao and Vietnamese – all from the Aquaculture and Fish Genetics Research Programme (AFGRP), 'Developing, implementing and evaluating policies to support fisheries co-management', 'Development and Management of Aquaculture-based Fisheries Enhancements' from MRAG Ltd, London, and the 'Fisheries and Adaptive Learning' from Imperial College. A West Bengali SHG Federation Secretary, Kuddus Ansary has written 'One-stop Aqua Shop (OAS) Better-Practice Guide', and a Jharkhand Fish Seed Transporter, Ras Bahari has written 'Ras Behari's Guide to

Buying Fish Seed', FAO has produced the BPGs 'Livelihoods Approaches - Capacity-building and Analysis', and 'Livelihoods Approaches', - are they important to the livelihoods of rural communities?

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)****.*

OWDM BPGs were validated in India with extremely vulnerable and disaster prone poor farmers in Western Orissa (in rainfed production systems) (2005-6). In Pakistan Policy Briefs were validated amongst senior policy shapers from Islamabad as well as Sindh, Punjab, Balochistan and NWFP provinces (2006).

R8363 BPGs were validated by fisheries and community leaders and in the building of links with meso- and apical policy makers and shapers, in India (2004-6) and Pakistan (2005-6). PBs were validated in with meso- and apical policy makers and shapers, in India and Pakistan, Cambodia, India, Indonesia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka and Vietnam in 2004. The improved efficiency of rural service provision involving sharing BPGs through One-stop Aqua Shops has been validated with extremely vulnerable poor farmers in Jharkhand (Ranchi) (in rainfed production systems) since 2004, Western Orissa (Nuapara, Bolangir) since 2005 (in rainfed, cross-cutting, high potential production systems), West Bengal (Purulia) since 2005, in Alipur, Punjab, Pakistan since 2006 (irrigated) and in Vietnam in Thanh Hai, Hai Thai, Doi May and Trang Tien villages, Tien Yen District, Quang Ninh province since 2006 (inland artisanal fishing, cross-cutting, land-water).

FAO policy briefs have been validated in Pakistan with senior policy makers and high-level meeting participants in Islamabad, in Rome and with project partners in Pakistan during 2006.

Current Situation

C. Current situation

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

Policy Briefs and Better Practice Guidelines being used by STREAM Communications Hub Managers of Cambodia, India, Indonesia, Nepal, Philippines, Sri Lanka and Vietnam to share the process tools with local networks in local languages.

In Cambodia the BPGs were shared with the Community-Based Natural Resource Management Learning Institute and other NGOs and also with the ADB Tonle Sap Environmental Management Project (TSEMP) who used then in determining information access around a new project around Siem Reap.

In Indonesia, the CSP and SHG BPGs are being used in work in coastal communities by government Technical

Implementing Units (TIUs) from Jambi, Sukabumi, South Kalimantan and North Sulawesi; farmers; Bogor Agriculture Institute, Gajamada University in Yogyakarta (Central Java) and Samratulangi University (North Sulawesi); Fisheries Services in North Sulawesi and the Bureau of Marine Affairs and Fisheries Research. All these organization began to promote and distribute the Bahasa versions of the STREAM BPGs following the 'Fresh Water TIUs Meeting' in Manado, North Sulawesi in 2005 entitled "Dissemination and Implementation of Fresh Water Culture Technology to Community" where they were introduced

Policy Briefs are being used by FAO working with policy makers in Pakistan under project TCP/PAK/3005 (A). The CBP is used in an FAO manual entitled "Guidelines for policy development and implementation through consensus and participation: examples from the fisheries/aquaculture sector".

WORLP BPGs are in use by One-stop Aqua Shops and customers including 1500 extremely vulnerable poor farmer members, and OWDM, to share aquaculture technologies with farmers and SHGs for implementing small scale aquaculture.

*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).***

A Policy Brief and Better Practice Guideline about the Consensus Building process are widely distributed and are currently in use in Pakistan. A Policy Brief is also in use to share the process of the new National Fisheries Policy Implementation plan.

BPGs are currently used in India to share fish culture techniques through One-stop Aqua Shops in Bolangir, Patnagarh and Saintala in Bolangir District, Orissa, Bilenjore, Nuapara and Kharihar in Nuapara District, Orissa, Ranchi, Ranchi District, Jharkhand, Kaipara Purulia District, West Bengal, in India; Alipur in Pakistan and in Thanh Hai, Hai Thai, Doi May and Trang Tien villages, Tien Yen District, Quang Ninh province in Vietnam.

BPGs are currently used in Indonesia by Technical Implementing Units from Jambi, Sukabumi, South Kalimantan and North Sulawesi; farmers; Bogor Agriculture Institute, Gajamada University in Yogyakarta (Central Java) and Samratulangi University (North Sulawesi); Fisheries Services in North Sulawesi, Bureau of Marine Affairs and Fisheries Research.

BPGs are used in Cambodia by the Community Fisheries Development Office and the ADB Tonle Sap Environmental Management Project (TSEMP).

BPGs are used in Vietnam by the Ministry of Fisheries National Extension Centre.

BPGs are used in Philippines by Bureau Fisheries and Aquatic Resources in Sapian Bay and Banate Bay.

BPGs are used in Nepal by the Information and Communication Centre in Kathmandu and CBP PB and BPGs by the Ministry of Agriculture policy-makers.

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

It took eighteen months to develop the genre working with the first three topics and conceiving and creating BPGs and PBs for each. Within a year 25 BPG and 5 PB titles were published. 600-800 BPGs were downloaded from the STREAM website in the first six months and 200-400 PBs. In the subsequent year 39,657 BPGs and 12,547 PBs were downloaded (30% of BPGs were process oriented and 70% technical; around 75% BPGs and 60% of PBs were in languages other than English).

To date 95,000 hard copies of technical BPGs have been made available through One-stop Aqua Shops and around 5,000 copies of process BPGs.

Since monitoring of use began in India a few month back there are over 1500 registered OAS users in rural areas with bar-coded membership cards that have received 3,516 BPGs. It is currently too early to comment in depth on the efficacy of the OAS in BPG sharing. There has been a long period of establishment, and this phase is almost complete. Many people are becoming aware of the OAS and many in villages know of the development nearest to them and advertising is being piloted – with a poster campaign in 530 villages in 20 blocks.

The Chief Minister of Orissa has announced a Special package for farmers of Orissa on 29th July 2006 (Published in Oriya in the daily newspaper “Samaj” on 15th August, 2006) including ‘a 20% grant for capital costs to develop an OAS in each block. Usage is still spreading.

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 constant presence of a Communications Hub linked with as many local institutions as possible to facilitate knowledge sharing and the catalysing and nurturing of good communications practice is a central tenant of the capacity to reach farmers effectively. This is particularly effective in India and a cost effective mechanism to reach very large numbers of extremely vulnerable poor people.

A international communications network with Hub Managers in regular connection, sharing approaches in a common language (probably English) and each translating between English and local languages is a very effective way to share processes and technologies such as those illustrated here.

Key to success is continuity of a communications platform (long term support), capacity building to translate meaning (not words) across language, cultures and overcome power-relations and constant engagement with primary stakeholders, those that work closely with them and those that shape policy.

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 project to develop BPGs with 12 countries built awareness and sharing continues through workshops including the STREAM Regional Conference (2005) and the internet. Printing was initiated with project funds but now funds are being leveraged from other sources especially the DFID WORLP and FAO. In 2005, the STREAM Initiative launched a One-stop Aqua Shop Information Service (OASIS) to supply communications materials, including Policy Briefs, Better-Practice Guidelines in twelve languages.

Communications Hubs in Iloilo Philippines, Islamabad, Pakistan, Bhubaneswar, India, Khathmandu, Nepal, Phnom Phen, Cambodia, Yangoon, Myanmar, Hanoi, Vietnam and Tehran, Iran are actively promoting the outputs.

*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)**.*

Because the availability of appropriate communications media in local languages for different audiences is very limited, the adoption of the new genres has been rapid because they fill this niche. However, extension services are weak and slow the spread materials and rural distribution infrastructure is limited and often seasonally compromised. The One-stop Aqua Shop development in India is growing and improving delivery mechanisms. Web-based distribution limits accessibility to those who are on line and especially disadvantages poor people in remote rural areas unless internet connected outlets are developed. Funds for up scaling are a key factor.

*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).***

The outputs themselves – high quality targeted extension materials, are important mechanisms to accelerate communications. Their participatory development and distribution linked to local, national, regional and international communications networks which makes use of combined digital and human communications mechanisms can rapidly increase access. Very local institutions (like One-stop Aqua Shops) which facilitate reach to extremely vulnerable poor people and provide a mechanism for people to access better extension communications will improve the capacity of primary stakeholders to use BPGs. Building capacity to write and use PBs will greatly effect inter-regional and international knowledge sharing. The expanded use of BPGs and BPs and linked networks to share them will diminish social, cultural, and linguistic barriers, providing for direct as well as experiential learning and adaptation of ‘other peoples quite good ideas’ to highly appropriate local solutions.

*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).***

Appropriate outputs are always well used. Nurturing ownership of outputs is an excellent way to promote their use. Many people learn by doing more than reading it is important to involve people where possible in the development/refinement or adaptation of outputs. Sharing in output development or even the development of

media about outputs is also effective.

If attractive, well targeted, piloted, written content can be made available to institutions local to farmers (like One-stop Aua Shops) it will be collected by interested parties. Better-Practice Guidelines are popular - written in simple local language with minimal written components and local photographic content and cartoons in a short 4-page format are effective for describing “procedures to improve ways of working”. They need to be short, informative and lively. They can reach illiterate colleagues in the context of Self-Help Groups where literate members read these.

Policy Briefs designed to give “succinct direction for busy professionals” in 2-pages or less with a summary panel on page one as an aide memoir for short meetings and back page leads to other sources of information are excellent for sharing ideas with key professional are effective in engaging politicians, policy administrators, policy advisors and consultants, donor agencies and planners. They can later be passed to others without loss of meaning and represent an efficient and accurate mechanism for delegated to follow up links.

Drama and video are good mechanisms of sharing ideas and in poor communities and often a good source of entertainment. In Orissa BPGs are to be used as scripts for 5 minute training videos. In hierarchical decision making scenarios influential drivers of change are crucial and the use of PBs helps to target key people and facilitates their capacity to delegate.

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.

R8363 FTR Annex A (2005) Enhancing Development Impact of Process Tools Piloted in Eastern India (August 2005) STREAM initiative. DFID NRSP.

The Kaipara story A closer look at the benefits of working together, the evolution of a federation of aquaculture self-help groups in rural West Bengal. A STREAM Story www.streaminitiative.org/Library/pdf/pdf-india/TheKaiparaStory.pdf

Western Orissa Rural Livelihoods project (2006) Joint Review Mission Report – Report On Aquaculture Development. Orissa Watershed Development Mission/nr international/STREAM Initiative/WORLP February, 2006.

Western Orissa Rural Livelihoods project (2006) Joint Review Mission Report – Report On Aquaculture Development. Orissa Watershed Development Mission/nr international/STREAM Initiative/WORLP. June, 2006.

WORLP (2006) Fish in our watershed - A booklet from the Western Orissa rural Livelihoods project. WORLP/ OWDM. Edited and Published by NR international.
WORLP (2006) Talking with Women - A booklet from the Western Orissa rural Livelihoods project. WORLP/ OWDM. Edited and Published by NR international.

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*

The development of these outputs has taken place very recently. No formal studies of impacts on poverty have been undertaken and indeed it is probably too early for this to be the case. The booklets and reviews referenced above provide a snap shot of where groups of extremely poor people in Western Orissa have reached in their newly started efforts to raise fish. Almost all are using Better Practice Guidelines, available to them from One-stop aqua Shops. There is significant detail of their efforts and their opinions related to their efforts. In some cases groups new to fish culture have been very successful. Sometimes production success has brought social difficulties, with others trying to capture their resources. There is no simple relationship between communicating, livelihoods success and impacts on poverty for extremely poor people in remote rural areas.

The development of ‘One-stop Aqua shop’ pilots in Orissa, West Bengal and Jharkhand has stimulate 1500 people to register as members in just a few months, usually one or two members from any Self Help Group. Most groups contain 10-15 people; most are accessing and using BPGs. It is highly likely that access to new knowledge is facilitating changes to people’s livelihoods and BPGs and OASs are beginning to spread and are changing the way in which information is made available to farmers and fishers improving their human capital. This issue was one recommended by farmers and fishers during R8100 and prioritised by experienced policy actors.

Experiences from eastern India were shared with eleven other countries in the region through a communications network, giving rise to local language and local context versions of tools developed in India. In neighbouring Pakistan policy formulation is more participatory as a result. There are no formal impact studies but the plight of extremely poor fishers has been highlighted by the process and in the context of the Pakistan PRSP there is pressure on provincial governments to focus development efforts towards poverty alleviation. As a result the Planning and Development Department in Punjab is likely to propose significant support to fishing communities in the Indus corridor who lack land, sanitation, schooling and health care.

The impact on poverty of well formulated guidance and well specified service provision can be immediate, providing new opportunities such as access to natural capital or micro-credit in ways that are useful to extremely vulnerable poor people or indirect and long term as primary stakeholders work through the development of a new opportunity to raise themselves out of poverty.

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)***

As significant collaborative thought and resources and links to international knowledge resources are involved in the development of Better Practice Guidelines and Policy Briefs the application of the resultant technology or policy action governments is likely to create environmentally sound approaches, policies or programmes. The inclusion of primary stakeholders in the process will help to uncover local environmental challenges.

The output is essentially a learning tool within rural services for (in this case sustainable aquaculture) development. The tool offers the potential for minimising significant negative environmental impacts and may provide a mechanism for awareness raising with poorer stakeholders on local environmental issues.

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

It is difficult to envisage how increasing access to knowledge of sustainable livelihood options will have adverse environmental consequences.

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)***

If the outputs contribute to the development and promotion of efficient systems for the provision of rural services to poor people including extremely vulnerable poor people, constructed within the context of climate change and risks of natural disaster it will include rural service provision for specific groups of poor people related to disaster preparedness and highlight constraints to the delivery of services essential to coping with the effects of climate change. The inclusive process of Better Practice Guideline development includes building of relationships between farmers and fishers, state- and national-level government and NGO actors providing a learning platform which can also give poor people an increased understanding of climate change issues that affect their lives.
