

Practical Answers: Report on Learning

Practical Answers International Team

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Table of Contents

Summary.....	4
1. Introduction	10
2. Learning about demand for technical information services	17
2.1 Analysis of Demand for Practical Answers.....	23
2.2. What are the barriers to obtaining new knowledge and to making use of knowledge	29
3. Results of analysis of demand for Practical Answers services	34
3.1. What are the limits of our knowledge?	34
3.2. What other suppliers of knowledge exist?	48

3.3. What processes are required to form effective partnerships?	59
3.4. How can Practical Answers become sustainable?	65
3.5. How do we know what technical information is needed and what the gaps are in supply?.....	70
3.6. Which formats of knowledge materials are suitable for delivery to different user groups?.....	76
4. Learning about impact of access to technical information services	82
4.1. What sort of marketing can we use to promote the service to increase its impact?	88
4.2. How do we make mass - web based materials have greater impact?	93
4.3. Which of our client groups (enquirers) have the most impact on poverty?	110
4.4. What forms of “accompaniment” are most effective?	118
4.5. What delivery structures are most effective?	121
4.6. What can we learn about quality assurance?	128
4.7. Learning about the Environment in Which Practical Answers Operates	129
5. Conclusions	138

6. References	143
Appendix A: Samples of TES country reports.....	145
Appendix A: Samples of TES country reports.....	145
Appendix B: Website statistical reports (osCommerce)	152
Appendix C: Surveys	162
UK Office – Email Survey	162
International Survey - Peru.....	170
Impact Study Survey – Bangladesh	173
Proposal for Knowledge Gaps Survey - Sudan	188

Summary

Practical Answers aims to contribute to poverty alleviation by providing knowledge services to poor communities. The general trend for the activities included within Practical Answers is towards a decentralised, multi faceted and interactive exchange of knowledge relating to appropriate technologies and their use. This means operating in more locations - either directly or indirectly; using a greater range of communication channels, or working in more languages including local dialects

The service has expanded gradually over recent years improving its reach into communities but the limits to the services provided are large compared to the needs it aims to address. This progression has focused on becoming more decentralised and providing more diverse solutions to peoples needs in terms of the way information can be presented. We have not found any evidence to counter this approach although there could be some modes of communication that need greater focus such as mobile phone technology,

**CDs, podcasts etc to compliment the many approaches already being used.
[Lesson1]**

A question remains about the approach to decentralisation in whether it should be done through intermediary bodies such as partner CBOs and extension services or Practical Action should create more of its own resource centres and knowledge nodes. This will depend on the local circumstances in different areas and available financial resources. Given that our own financial resources will be quite limited in regard to the needs we aim at building a broad partnership of international and local organisations interested in our model of providing knowledge services. We had positive responses from IFAD, UNDP, CARE, Christian Aid, and local organisations in Bangladesh, Sudan, Nepal, Sri Lanka, Kenya, and Peru. [Lesson2]

Practical Answers provides information in quite a few areas of appropriate technologies but not on all areas of technology that might be of interest to diverse groups of existing and potential beneficiaries. People need a wide range of knowledge which is broader than the expertise within Practical

Action and also complementary knowledge in such areas as market, banking, legal matters, health care, and social issues. [Lesson3]

Demand for knowledge has been relatively well documented in terms of what people's knowledge requirements are (subjects, delivery formats, geographic characteristics, and seasons). There are indications that there is a large latent demand that could be addressed. For example; radio broadcasts generated huge interest in particular subjects and stretched the capacity of the organisation to deliver.

The impact of the various activities of Practical Answers has been more difficult to measure but the case studies produced have demonstrated that the impact can be very positive.

Greatest impact comes from CBOs, NGOs and in some respects Government bodies that have in the past not been included in the target group for Practical Answers. We need a comprehensive framework for impact

assessment. The elaboration of the framework with require and external assistance. [Lesson4]

The approach taken in delivering information depends on who you are communicating with and there is not one approach that is best in all circumstances. Villages will make best use of demonstrations or drama while NGO workers might find written documents more useful and engineers might need schematics or diagrams. Language is an important issue and current work includes developing a website presence in Arabic and Bengali.

Website technologies and access to Internet (telecentres) are developing rapidly requiring concerted effort to keep pace with change while also providing opportunities to work in new ways and to engage with a wider range of people. Practical Answers must develop more sophisticated and effective online facilities, e.g. multilingual websites capable of maintaining multimedia materials. [Lesson5]

Practical Answers aims to work cohesively across the group making use of the skills and experiences of people across the group to maximise the effectiveness of its operations. The Practical Answers team is relatively new to many elements of what Practical Answers is undertaking and consequently learning new skills and innovating as the project develops. Capacity building within the Practical Action offices is a necessary part of the project as it grows. [Lesson6]

Practical Answers exists within a larger framework on information providers working in different ways. This can appear as a disorganised and random array of actors working in isolation; although there are many areas of collaboration that exist these are limited in relation to the overall picture and there is potential to expand on these relationships.

The process of producing a lesson learning report has been useful in highlighting issues and areas where Practical Answers needs to undertake more research and gain greater understanding. It highlights the need for

continuous learning and assessment being incorporated into the structure of the project.

1. Introduction

Poor people with little or have very limited capacity to benefit from the materials available in traditional libraries.



no basic education opportunity and wealth of information electronic media and

The Practical Action tries to address this problem through by providing information through its Practical Answers project. Practical Answers is the name of the technical information service and comprises of a number of initiatives developed over the 40 years in which ITDG / Practical Action has provided information on small-scale appropriate technologies.

The service is provided free of charge to a target client group comprising of grassroots development workers, community based and non-governmental

organisations and other agencies using appropriate technologies in the developing world as well as directly to people who need knowledge to improve their livelihoods. Academic institutes and government bodies have not been included in its target group as these bodies have the financial resources to obtain information.

Practical Answers includes:

- **Technical Enquiry Service (direct contact with enquirers)**
- **Technical Information Online (Practical Answers websites – UK Practical Answers, Peru Infolactea and Soluciones Prácticas, Sri Lanka Janathakshan)**
- **Resource Centres (shared with AIMs and Practical Action’s projects)**

Coordinators within the Practical Answers team from all offices call upon information specialists within Practical Action and externally answer around 3500 individual enquiries a year ranging from fruit drying to water pumps and rainwater harvesting to solar energy. Enquiries can be made through a face to face meeting, by email, post or through the online forms. Bespoke responses

comprise of specific contextualised information relating to the needs of the enquirer accompanied with various information materials such as technical briefs, guides, manuals, engineering drawings and publications.

Information materials are also available online. More than 22,000 people who downloaded our materials in the last 12 months (2008) claimed that in excess of 600,000 people will benefit from the obtained information.

Resource centres enable people to find information in publications and through internet facilities. These centres may also provide other services that are useful to the local community.

The main focus of services is to provide access to information about technologies pertinent to the improvement of livelihoods of poor people in developing countries. The goal is to contribute to poverty alleviation by facilitating knowledge sharing among all stakeholders – development practitioners, poor communities, extension workers, government officers, researchers, development project staff, NGOs, and local administration.

Practical Answers' services attempt to meet concrete needs of people who seek knowledge to get out of poverty and improve their livelihoods. The main challenges in providing knowledge services are:-

- **building awareness of information services among potential beneficiaries,**
- **relevancy - identification of specific demands for knowledge at the grassroots level,**
- **development of repositories of knowledge products that can be delivered in diverse formats appropriate for the absorption capacity of their users,**
- **coverage - availability of comprehensive collections of knowledge products helpful in solving real life problems,**
- **facilitation of production of appropriate knowledge products (localization, contextualization),**
- **operation of knowledge sharing network and communication channels.**

While providing the information services, we are trying to learn about the market for knowledge (Which knowledge is really needed and sought by people?) and the most effective methods of delivery/sharing of knowledge with diverse groups of target audiences. We also need to know about the gaps in our collections of knowledge materials and sources of complementary information, e.g. market, suppliers, regulations.

The learning objectives (see the proposal to DFID) about demand of the Practical Answers project included seeking answers to the following questions.

Questions to be answered in demand assessment

- (1) What are the limits of our knowledge?**
- (2) What other suppliers of knowledge exist?**
- (3) What processes are required to form effective partnerships?**
- (4) How can Practical Answers become sustainable?**

(5) How do we know what technical information is needed and what the gaps are in supply?

Questions to be answered in impact assessment

(6) What sort of marketing can we use to promote the service to increase its impact?

(7) How do we make mass - web based materials have greater impact?

(8) Which of our client groups (enquirers) have the most impact on poverty?

(9) What forms of “accompaniment” are most effective? What are the costs and benefits of “accompaniment”? Can accompaniment be achieved through partners? What support is needed so as to build the capacity to provide high impact accompaniment?

(10) How can we improve our internal working to increase impact on poverty?

Additional questions related to demand analysis emerged during the implementation of the project:

(11) Which formats of knowledge materials are suitable for delivery to different user groups (extension workers, farmers, researchers, administrative staff)?

(12) What delivery structures are most effective?

(13) What can we learn about quality assurance?

This report is a summary of Practical Answers' learning since the start of the project in August 2007, and from earlier experiences of technical enquiries service (provided since 1968).

It builds on previous studies John Rowley et al & Connecting the First Mile Surmaya Talyarkhan et al. and brings together lesson learning from the Practical Action offices in 8 geographical regions. It focuses on the progress of the service up to the end of September 2008.

2. Learning about demand for technical information services

What is the demand assessment in the context of Practical Answers?

The demand assessment is a procedure of determining the extent of provided services in relation to the estimation or evidence of demand for knowledge materials.

The coverage of knowledge subjects, category and number of users, geographic locations, formats and delivery methods of knowledge materials constitute the context of demand assessment.

We need to consider:

- Actual demand**
- Potential / latent demand**
- Future demand**
- Evolution of demand**

This paper concerns the analysis of demand based on statistical data (TES database, website statistics, and surveys) and informal interviews with users of services. This is contrasted with latent demand and the potential demand that a future service could face.

The purpose of demand assessment is to provide a basis for determining the ways to improve the services. Our goal is to respond better to actual demands for knowledge of diverse groups of users and thus to contribute to poverty reduction. The demand assessment is a basis for strategic decisions concerning the scope of coverage of knowledge subjects and outreach methods.

What data has been collected to answer the questions about demand? Practical Answers teams in all eight Practical Action operational regions collected statistical data about technical enquiries services. Information was collected through interviews, stories, case studies, narrative quarterly reports, and telephone communications and email correspondence with

users of enquiry and online services. In addition, the data about online services via websites (Practical Answers, Soluciones Prácticas, Infolactea, and Janathakshan) was collected automatically using the website management software and with online surveys.

Technical Enquiry Service

The technical enquiry service collects information about the enquiry and the enquirer.

Categories of collected data:

- **user attributes (NGO, CBO, Individual, Academic or Government)**
- **geographic attributes (country of application)**
- **subject of enquiry (technological categories such agriculture or manufacturing)**
- **feedback (what was done with the information and what was its impact)**
- **target audience attributes (Number of beneficiaries)**

This data collection is the basis for monthly and quarterly statistical reports. Appendix A provides samples of collected data and reports.

Some variation in information collection exists between offices within Practical Answers. For example, Bangladesh collects data saying if the enquirer was a farmer and non farmer. Additional data is collected such as gender of inquirer is recorded in many instances and the mode of communication to compare use of email with face to face contact.

Practical Answers data online

Website statistics are captured from (Practical Answers Online in the UK, Soluciones Prácticas, & Infolactea based in Peru and Janathakshan based in Sri Lanka)

The analysis of online data allows for findings such as:

- **the most popular knowledge product among different groups of users**
- **which knowledge product are popular in different seasons**
- **which user groups and from which countries are frequent users of online facilities**

- **identification of potential impact assessment locations based on comments received from users of technical briefs.**

Appendix B provides samples of collected online data.

Surveys

Additional data has been collected through surveys (please see Appendix C) and in Resource Centres (reflected in quarterly reports from Country Offices)

Data collection

The evaluation of ITAD states that in the past the “The monitoring of user-types and topics of enquires has been poorly designed so there has been little learning from the monitoring data.”

It has also suggested that the reporting methods were just serving an administrative function which means that the data is limited in terms of learning.

In addition the system led to massive under-reporting of work done in providing information to large numbers of people who were not considered ‘target’ users by DFID (academics, students and government bodies).

ITAD has painted it as representing an “old model of work” for which the success in poverty reducing could not be highlighted.

[Review of the Current Database and the follow up Checklist 31 October, 2007 Faridpur Office Highlighted in the International Report – Aug 07 – Oct 07]

Practical Answers needs to update its data collection in order to respond to demands for new learning. A static model will not provide sufficient insight to a developing service. The data collection requirements need to be determined but should shift more towards measuring the impact.

Practical Answers learned that statistical data must be supplemented by corroborating evidence to verify statistics and that we need more sophisticated classification of user groups and topics.

Practical Answers needs to investigate the impact of building awareness of knowledge services among the poorest communities in terms of demand and topics of knowledge materials.

2.1 Analysis of Demand for Practical Answers

2.1.1 What is the demand?

How do we know what information is needed to compliment peoples existing knowledge

Information on the requirements of people is determined through the technical enquiry service. This service is a demand driven service and statistics are gathered on the enquiries. This is one of the drivers of the generation of technical briefs which then are made available through the website and other sources.

Website data and comments from users also highlight the needs.

Bangladesh carried out a survey of information needs for some villages in the Faridpur region.

Practical Action Sudan undertook a Knowledge Gap Survey in September 2008 compiled by Dr. Abdelaziz Karamalla Gaiballa. Survey sampling covered members representing different rural livelihood activities. The members covered in Kassala are organized by Elgandool, which is a NNGO.

Practical Action South Asia commissioned a study to the partner organization OSVSWA (parent organization of IRMA-India) in 2001, for the assessment of the access constraints as well as access needs of the tribal communities in Orissa- the poorest State of India having 48 percent of its 37 million people living below poverty line. A cluster of 17 tribal villages of Chadeyapalli Gram Panchayat (local government unit), under Daspalla Block (sub-district) of Nayagarh district in Orissa was taken up as the study area. [SL 2nd Qrt International Report Feb 08 –April 08]

JMO – Infolactea Report – 2008 outlined the survey of user requirements for the infolactea project.

Who needs information?

Practical Action is focused on poverty reduction and therefore the needs of people living in poverty are the primary focus of any activity although there is a question of how the target group’s needs can best be met, either directly or through intermediaries.

Information in Bangladesh was primarily provided directly to the beneficiaries. Their perceptions were gathered in a well being analysis carried out by Practical Action Bangladesh in 6 communities in Faridpur where 49.4% of the people surveyed were illiterate. “The illiterate group related knowledge with income and vulnerability more than the literate group.” Men perceived knowledge as relating to business and decision making while women perceived it as acquiring new skills and human rights issues were also important. Education for children was an important element to both sexes.”

[Final Technical Report – 2007]. In contrast the information requests made to the UK were mainly from intermediary bodies such as NGOs and governmental departments and were entirely made up of literate and generally highly educated individuals who made requests in relation to potential beneficiaries that were Practical Answers target group.

The most cases there is a combination of direct and indirect delivery. Indirect delivery provides greater coverage in terms of numbers of people reached but does not provide as targeted a response as direct contact would. Working with others in delivery will provide the best opportunity for reaching the most people in need while allowing Practical Action to deliver localised knowledge.

What is the critical knowledge needed

Although there is a strong emphasis on small-scale entrepreneurial activities, the type of knowledge required is diverse with variation between locations. The information needs to be specific and applicable to the particular individual. The same subject may require a different solution for individuals

in different locations or in different circumstances so one solution does not fit all.

Income was the primary concern although, education was a strong secondary concern then in order of priority were health & hygiene, skill development and then flood vulnerability. [Final Technical Report – 2007 Bangladesh]

Information on technologies is often related to commercial considerations (making money) and business and market information needs to be available in conjunction with information about technologies. Commercial information on where to buy equipment is repeatedly in demand and marketing support to sell produce was also important.

Types of enquirer registered by Practical Action Bangladesh two field offices and two rural technology centres is dominated by farmers that need information on agriculture, fisheries and livestock who were semi educated or had no formal education. [A primary Analysis of the Technical Inquiry Service: February – April 2008 quarter]

The Sudan Knowledge Gap Survey also investigated the needs of rural communities in El Fashir and Kassala where there was a need for information on farming and livestock activities, however, there was also a need for information on legal land issues and on financing and marketing.

For farmers there is a seasonal element to information requirements and timing can be critical for successful harvests; especially so in areas prone to flooding. The aspect of timeliness is also important in disaster response situations

[A primary Analysis of the Technical Inquiry Service: February – April 2008 quarter]

Publications with specific technical details are required in order for people to be able to implement the technologies for themselves. [Kenya 2nd Qtr International Report] while balancing this with alternative forms of knowledge transfer such as training courses, that can be effective especially with more complex activities, which was favoured in Sri Lanka. There will be a cross over point at which one approach is more effective than the other.

From a UK perspective the question of how Practical Answers improves the projects of other NGOs, Government agencies & charitable initiatives to produce positive impact on poverty reduction arises. Can project and process best practice be part of the Practical Answers portfolio? Mansoor Ali is working to develop knowledge products in this area that will go along side information on small-scale technologies. This would mean developing an additional section to Practical Answers which covered these subjects which will require resourcing in a similar way to the other information provided. It would however link well with the project work of Practical Action which often has best practice approaches to share.

2.2. What are the barriers to obtaining new knowledge and to making use of knowledge

Research in Bangladesh determined that lack of people's interaction, mutual trust and social networking were found to be the three most important

barriers of managing tacit knowledge in rural areas. In some areas social conflict played a part.

Segregation of households and families was also found to be an important barrier of tacit knowledge while illiteracy, language, lack of resources and time were barriers to explicit knowledge. Absence of a suitable promoting organisation also restricted knowledge acquisition in certain areas. [Final Technical Report – 2007]

Practical Action Southern Africa reported that people had informed them that they found it difficult to obtain information from a central resource centre based in Harare which was too distant for people living outside the capital city. This supports the concept of multiple knowledge centres or nodes that are located closer to where the information is needed. Much of the work over the year has been on expanding the number of access points to Practical Answers through indirect knowledge centres of various sorts. One solution to this barrier is highlighted in Kenya of a “donkey library “People of Magadi are also using donkeys to transport books from one location to another and this has introduced a new reading culture in the area. Though there are no

libraries in Magadi young people and school going children now have access to books.

The groups surveyed for the Knowledge Gap Survey in Sudan highlighted that direct demonstration is the best mean of presenting knowledge to enable people to see the significant of the information which would otherwise not be conveyed by other means and consequently not made use of.

Barriers to implementation

Although there is an issue with access to information it is also apparent that there are other barriers to making good use of the information that can be acquired and that information alone will not resolve issues of poverty. In many instances lack of funds will be a barrier to implementing a project or commercial venture.

Implementation problems identified in Bangladesh included lack of access to fertilizer, water for irrigation, vegetable, crop and fish seed, rice saplings, poultry vaccines, and equipment. These restrict the ability of people to make

use of information that they acquire and that supplementary support to knowledge provision to overcome these shortages was required. [A primary Analysis of the Technical inquiry service: February – April 2008 quarter]

Barriers to successful implementation to projects highlighted by feedback to the UK office includes; “Small-scale production techniques struggle to compete with mass produced imports undermining local business initiatives. This makes it important to accurately assess the economic and market aspects of technology innovations rather than dealing with technology issues in isolation.” [Qasid Safir – Project development working in Gambia, 2008]

Information is embedded within a wider environment in which we should know more about and determine if there are activities that Practical Action can implement that will improve impact of information delivery such as seed delivery and other accompaniments.

Conclusion

Knowledge requirements will be dependent on the particular location geographically and on their own circumstances and on which category of enquirer they are from. Diversification of information delivery systems and products is needed to improve reach but diversification of accompaniments will also be beneficial; knowledge along side seed shops or in collaboration with micro credit services.

3. Results of analysis of demand for Practical Answers services

3.1. What are the limits of our knowledge?

Practical Answers materials cover small-scale appropriate technology for poverty reduction and strengthening resilience. This reflects the nature of Practical Action and as such the analysis of its limits. Our knowledge focuses primarily on technical knowledge needed in development and poverty alleviation.

Practical Answers Online website classification provides an indication of this technology focus:

- **Agriculture**
- **Construction**
- **Crop and food processing**
- **Disaster mitigation & rebuilding**
- **Energy**
- **Information and Communication**
- **Manufacturing & Production**

- Mining and minerals
- Natural resource management
- Transport
- Adaptation to Climate Change

The TES database statistics (individual enquiries for the United Kingdom—direct contact) and website (batch downloads from Practical Answers website) for the period August 2007 – July 2008 indicate that the largest amount of disseminated materials concerned:

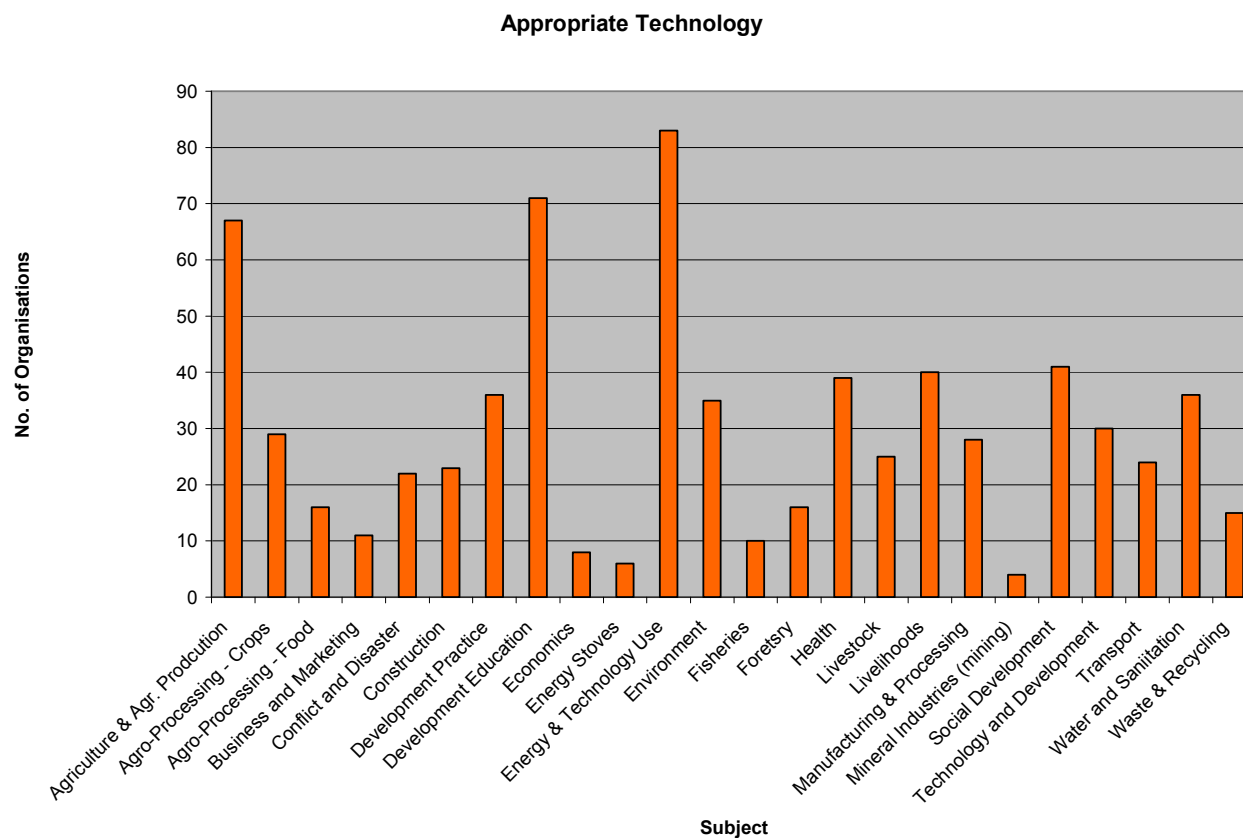
Theme	Enquiry	Website
Energy	690	18,739
Crop and Food Processing	608	19,504
Agriculture	491	9,652
Water & Sanitation	228	3,296

The numbers for the most popular downloads and enquiries indicate the demand on the one side and the good coverage on the other side. Lower numbers for other knowledge materials such as Mining and Minerals or ICT may indicate that:

- **The coverage of subjects is inadequate to attract larger number of enquiries and downloads**
- **Better sources exist**
- **The subjects are not in demand for our target audiences.**
- **People do not expect to get information on the subject and so do not ask resulting in hidden demand. (the web side may enforce this).**

For example; Mining and Minerals is no longer on the main Practical Action website as a technology area although it still exists in an archive format. Practical Action Consulting rank eight under small scale mining and minerals while the Mineral Resource Forum – Small scale mining section which ranks highest hosts some ITDG documentation on the subject indicating that there is not a large provision of information in this area. Collaboration of this comes from the following table which shows very few organisations involved in this

sector. The table shows development organisations in relation to their technical areas of operation. The sample was taken from the Infoserv contacts database within the UK.



Additional data (user survey) would be needed to reach more precise conclusions. Scale of operation or number of people involved in an area will be a factor. For Example relatively few people will be involved in small-scale mining but the impact of their activities might have a big impact on certain economies. In comparison Agricultural activities are far more widely spread.

Practical Answers has valuable materials in its existing information resources and as such information on small scale energy, agriculture, crop and food processing should be maintained and developed further in response to ongoing demands. Practical Answers may struggle to maintain adequate knowledge in all areas; there is no longer a sufficiently strong body of knowledge within mining without partnering, possibly with Practical Action Consulting. Other subjects that are not well covered by Practical Answers also include; textiles, health, etc which may well be better covered by other organisations such as Healthlink International (which was originally part of ITDG) in the case of health. Some subjects may not be covered by other organisations; such as textiles.

However, there is a need to continue to review materials concerning the subjects covered and respond to trends in demand as well as determine which subjects are least useful and determine the causes; such as inadequate coverage by Practical Action, alternative resources that better meet demand requirements or general lack of interest in the technology.

The recently created category of Adaptation to Climate Change is very popular despite the fact that none of the content is new. Suitable packaging or clustering of information makes it more relevant and accessible to potential users.

<u>Theme</u>	<u>Downloads</u>	<u>~No. of Beneficiaries</u>
<u>Solar Energy</u>	11129	166007
<u>Nut Processing & Oil Products</u>	8485	120072
<u>Water Pumping & Drilling</u>	6978	105054

<u>Drying</u>	5308	72577
<u>Waste and recycling</u>	4825	68804
<u>Cement and Binders</u>	4158	58110
<u>Energy</u>	3858	56425
<u>Transport</u>	3824	48719
<u>Fruit & Vegetables</u>	3545	55301
<u>Sanitation</u>	3526	50561
<u>Juices and Drinks</u>	3238	44715
<u>Adaptation to Climate Change</u>	3191	47936
<u>Water Collection and Irrigation</u>	3159	49435
<u>Cultivation</u>	3124	41901

<u>Fuels and</u>		
<u>Engines</u>	3027	33978
<u>Herbs & Spices</u>	2968	44984
<u>Crop and food</u>		
<u>processing</u>	2614	33859
<u>Stoves and</u>		
<u>Ovens</u>	2558	27861
<u>Rainwater</u>		
<u>Harvesting</u>	2454	35019
<u>Earth</u>		
<u>Construction</u>	2383	38313
<u>Wind Power</u>	2120	17764
<u>Stone</u>		
<u>Construction</u>	1963	26786
<u>Water</u>		
<u>Treatments</u>	1962	26214
<u>Soil Fertility</u>		
<u>and</u>	1915	27947

<u>Composting</u>		
<u>Pickles & Vinegars</u>	1888	26362
<u>Manufacturing</u>	1789	27105
<u>Disaster mitigation & rebuilding</u>	1742	24678
<u>Engineering Drawings</u>	1735	16847
<u>Metalworking</u>	1634	16951
<u>Honey & Sugar</u>	1574	19470
<u>Hydro Power</u>	1560	15794
<u>Building Design</u>	1558	24055
<u>Animal Husbandry and Beekeeping</u>	1518	25814
<u>Snack Foods</u>	1517	19398
<u>Dairy</u>	1508	16458

<u>Wood &</u>		
<u>Bamboo</u>	1435	15794
<u>Preserves</u>	1374	20845
<u>Natural</u>		
<u>resource</u>		
<u>management</u>	1325	16510
<u>Packaging &</u>		
<u>Bottling</u>	1252	15858
<u>Construction</u>	1217	19881
<u>Mining and</u>		
<u>minerals</u>	1197	11925
<u>Clay Bricks</u>	1195	11948
<u>Legumes,</u>		
<u>Beans & Grains</u>	1057	14164
<u>Information</u>		
<u>and</u>		
<u>Communication</u>	921	13845
<u>Pottery &</u>	888	8845

<u>ceramics</u>		
<u>Textiles</u>	775	10891
<u>Water and sanitation</u>	759	14903
<u>Fish Farming and Aquiculture</u>	745	10605
<u>Roofing</u>	667	6868
<u>Seed Fairs and Storage</u>	440	7807
<u>Stories of change</u>	226	4671
<u>Videos</u>	72	869

People who obtain technical information from Practical Answers are also interested in obtaining information about non technical elements of business, markets, finance, development best practice, health services, equipment and materials suppliers, and government regulations. The issue arising of the

inclusion of non technical elements to Practical Answers has recently been looked at by Mansoor Ali who is intending to include more process information to accompany the technical information provided on the website. Examples of subjects include Participatory Planning, Income & Employment, and Capacity Approaches. There is also some potential to include information relating to Access to Markets. This more holistic approach reflects the approach taken with the technical enquiry service over the years, especially linking technology options with enterprise development. It would also better reflect the needs of users better.

Suggested areas of information requirements

- **Get a list of trainers who can undertake training in simple technologies whom we can reference in future (Kenya)**
- **Commercial suppliers (various)**
- **Information on other development organisations and information resources providing linking opportunities (UK)**

Practical Answers should not be restricted to technical issues alone but integrate appropriate technology into the wider social and economical context in which people live. This includes the wider information environment.

Limits in geographical coverage exist. The coverage is focused in the geographical locations in which Practical Action has offices but enquires from other regions are received on a regular basis. Responding to this demand allows Practical Answers to have a greater coverage than direct project work but impact where Practical Action does not have a presence is limited and generally through intermediaries. Collaboration with other organisations could allow Practical Answers to be more effective in its geographical coverage (Particularly West Africa where Practical Action has received many enquiries over the years, in English and French).

Limits in language are apparent, especially in the website information. Although enquiries are predominantly dealt with in local languages & printed material is produced in local languages, for example Peru has booklets in

Quechua and East Africa has identified technical briefs on peanut butter making and juice processing for translation into KiSwahili, the web information is currently restricted to English, Spanish, Sinhala & Tamil. However, two more language sites are being developed for Arabic and Bangla and scoping work on Oriya and Urdu has been undertaken by Practical Action South Asia.

This leaves the Southern Africa office (Shona (85%), Ndebele (15%) for Zimbabwe & Portuguese for Mozambique), East Africa (Kenya Kiswahili) and Nepal (Nepali) outstanding in terms of their web presence in relation to Practical Answers. Other languages are not covered to any extent even when a demand is demonstrated such as with French for West African countries.

Lesson

There needs to be some recognition of the existing limits and constraints with such a service. Limits on what Practical Action can provide should be complimented with collaborations with other organisations in terms of specialisations and geographical coverage. Information should be packaged

to suit users requirements thus combinations of information types and subject matter would be produced depending the individual circumstances.

3.2. What other suppliers of knowledge exist?

The sources of knowledge that exist for poor people will be diverse and varied;

NGOs, family, schools, neighbours, market places, and media such as radio and television. Family was the primary source of information. Friends and experienced people in the neighbourhood played a very important role in information provision. Social interaction played a greater role in knowledge acquisition to poorer less educated groups than to higher educated groups. [Final Report 2007 – Bangladesh].

Consideration of gender issues in information provision should also be incorporated into our understanding “Men watched television in the bazaar while women tended to listen to the radio at home”. [Final Report 2007 – Bangladesh].

[See Making Knowledge Networks Work for the Poor?]

Within this framework NGOs are one source of information amongst many and understanding this interplay of information resources will help Practical Action address the needs of poor people.

Focusing on the area of NGOs, other knowledge suppliers have a role as information intermediaries to the information generated by Practical Action as well Practical Action acting as an intermediary to information from others. This makes a complex interplay between various bodies that potentially has great benefits in adaption to local needs and broadening contributions. Examples of knowledge brokers using Practical Action information include:

- **Translations of material by Tearfund into French**
- **ADRA Somalia requested permission to translate technical briefs into Somali**
- **SUN – Society for the Underprivileged, India wanted to translate material.**

- **TALC – Teaching Aids at Low Cost**
- **Pakistan Resource Centre**
- **Cathy Rich Food Processing Centre in Sri Lanka**

Practical Action through Arid Lands Information Network (ALIN-EA), AfriAfya and Kenya National Library Service (KNLS) have distributed locally published publications to more than 80 Community Information Centres throughout Kenya.

In Bangladesh 5 organisations (CARE, Amader Gram, D-net, Rupantar) were contacted. CARE has knowledge on natural resource, livelihoods disaster and right based approach etc., D-net – an information based NGO has identified 11 sub-sectors (Agriculture, Health, education, non-farm, law, job, contacts and address, disaster etc.) to promote knowledge information service. Amader Gram – a National NGO working for development has specialisation on ICT for development. All NGOs expressed interest for a kind of knowledge partnership with Practical Action. [Bangladesh 2nd Qrt International Report Nov 07 – Jan 08]

Janathakshan system extension: The Practical Answers South Asia team is making efforts to extend the offline mode of Janathakshan system (to begin with) to Orissa, through IRMA-India, and there on develop the online system from the lessons learnt regarding content and the mobilisation of community members to visit and use the information centres. [Sri Lanka 2nd Qrt Internatioanl Report]

Web information providers that use information from Practical Action include;

Appropedia, Howtopedia, CD3WD, TechnoPoint, FAO InPHo,

There are a number of organiastions providing technical enquiry services although these operate with different approaches.

INTI, The International Network for Technical Information which provided linkages between question and answer services included a number of organisation that are still operational including:

- **Agromisa - Netherlands**
- **DIO - Netherlands**
- **WOT - Netherlands**
- **Garden Organic / HDRA - UK**

Other organisations with Q&A services that have regular interaction with Practical Answers UK include:

- **WaterAid - UK**
- **CTA – Netherlands**
- **CAT – UK**
- **REDR – UK disaster relief**

Lack of funding and changes in operational models has restricted similar activities in this activity for other organisations such as

- **GTZ/GATE - Germany**
- **SKAT – Switzerland**
- **GRET –France**

- **TraidCraft - UK**

Some organisations that I'm not sure about their current status include

- **InPho/FAO Italy post harvest**
- **ILO ASIST**
- **VSO – UK**

INTI primarily linked European development organisations but there are other Q&A services based in other regions. For example:

Rural Technology Information Unit – RTIU, Ghana was generated by a World Bank/Agri-systems consultancy. “Its establishment was assisted by Bob Spencer, founder and then manager of ITDG’s Technical Enquiry Unit, Thus RTIU was set up fairly close to the ITDG TEU model.”

Ghana Agricultural Information Service (GAINS), Ghana, linked to CTA.

ECHO, USA Website: <http://www.echonet.org>

“Overseas workers can also contact a member of ECHO's Technical Response Unit (TRU) to request additional assistance in developing ideas for an agricultural project, ways to meet the needs of their communities, what seed crops may do well in their climate zones, etc. The Technical Response Unit will receive the requests, work with the agriculturalist to acquire information and needs, research the possibilities, and respond with recommendations best suited for that development worker's situation.”

SNV - Netherland Development Organisation , The Netherlands

<http://www.snvworld.org/> SNV, the Netherlands-based international development organisation that provides advice to local organisations in developing countries.

Also worth looking into is BASIN The Building Advisory Service Information Network

which seems to have moved to Development Alternatives in India.

Although Practical Action probably can not investigate all potential information sources it would be possible to research current state of Q&A services focused on development with particular interest on services within Developing Countries. This could be used as a basis for developing a new broader network of Q&A service providers (INTI+) which could be beneficial for future franchise development. Some research in this area has already been done but probably needs to be updated.

Also see EnterpriseWorks USA who recently provided useful information to one of our enquirers after a referral demonstrating that information is available from organisations that do not run a formal Q&A service. There are many other examples.

Practical Answers UK is also working with Practical Action Consultants within The DEWpoint information service (www.dewpoint.org.uk) for DFID and has worked with the Practical Action education department on the Sustainable Design Award Q&A service

This service is aimed at DFID staff working in the field and users need to register to use the service. It has a focus on water supply and sanitation. These demonstrate alternative approaches to information provision within the UK office.

Beyond the Q&A service providers we could also look at some interesting information provision models.

There are thousands of other suppliers of information on the Internet, some of which operate in the areas covered by Practical Answers' services, such as CTA online information, IITA's Cassava knowledge cluster, Healthlink information service SOURCE and WEDC's WELL. There are many more interesting activities that we can compare and contrast.

At the community level local and national government provide extension services that include dissemination of educational and information materials. Radio and TV broadcasting are important and effective sources of agricultural, market, and technical information.

Practical Answers officers and field offices look after establishing cooperation with potential partners in providing knowledge services.

Practical Answers will not be able to cover all subjects relevant to poverty eradication but we ought to investigate what are the other sources of information to complement the technical enquiry services and should be able to direct our clients to relevant knowledge resources.

Information from other organisations is being linked to or hosted by Practical Answers Online. In addition to linking to Practical Action websites such as Janathakshan, Practical Action Publishing, and Soluciones Prácticas, Practical Answers Online has links to material from Agromisa, CTA, GATE/GTZ and is hosting documents from EWB/SIBAT, University of Punjab, The De Montfort University, The Appropriate Technology Magazine. Practical Answers online is looking to improve its links with HEDON, The Kenya Agricultural Research Institute (KARI), and Apt Consultancies amongst others.

We also have some notes about linking to AidWorkers Network which has not yet been fully investigated although there seems to be some links within Kenya.

Country offices should know about additional knowledge resources useful to our beneficiaries such as demonstration sites, government information services, market information centres, programmes on TV and radio, cultural and business events (exhibitions, local meetings and festivals).

Practical Answers has been looking at knowledge products complementary to our materials and trialling combining our knowledge resources within the Practical Answers website. However, this is still in its early stages and needs to be developed further.

Lesson

Practical Action needs to develop a network (international and local) of knowledge providers and look at way of collaborating with other organisations in providing knowledge.

3.3. What processes are required to form effective partnerships?

We consider partnerships in the following joint activities:

- **production of knowledge materials,**
- **dissemination of knowledge materials, and**
- **needs analysis and impact assessment.**

Effective partnership is vital for covering a broad spectrum of knowledge materials needed by communities in fighting poverty and improving livelihoods.

Experiences from our country offices tell us that the partnership should encompass diverse institutions, communities and groups of professionals.

The most important is genuine partnership with communities that allows for better understanding of demand for knowledge materials, building trust,

developing the attitude leading to the ownership of local knowledge resources by the community.

All country offices are involved in building partnerships in their countries and report in their quarterly reports about the progress. Some experiences are summarized in the following points.

There is a need to analyse and describe types of partnership and collaborations and determine their relative benefits in relationship to existing partnerships throughout Practical Action.

Existing partnerships and collaborations within the UK include, some formal and some informal.

INTI – The International Network for Technical Information

Tearfund

Engineers Without Borders

HowtoPedia

Appropedia

HEDON

Research Information – Appropriate Technology Magazine

With “El GRUPO” (Catholic University) <http://www.pucp.edu.pe/grupo/> Practical Action Peru office had two meetings to discuss better mechanisms to work together and we are planning to develop some material together (technical material especially in topics like solar energy, hydro power, that are topics that we both work).

With AGRORED (<http://www.agroredperu.org/>) - a network that includes all the national organisations that work in agriculture, Soluciones Prácticas has participated in their meetings.

Also INDECI – The National Institute of Civil Defence (<http://www.indeci.gob.pe/>) and other organisations that work in disaster prevention (NGO, governments, etc.) are creating a network of libraries, related to disaster prevention.

Partnering has come in many forms and on various scales; in Bangladesh these partnerships include Rural Technology Centres, fertilizer dealers, private extensionists & commercial outlets. There is potential to develop greater linkages with government offices.

In Sudan development of Knowledge Centres in partnership with the Sudan University of Science and Technology, the Institute for Family and Community Development in Khartoum and Kassala Women Development Associations Network aim to deliver localised knowledge in the areas of Darfur, Kassala, and the Blue Nile.

In Kassala, informal partnerships have been formed with the INGO's GOAL and ACCORD and also with the Plant Protection Organisation which is part of the Ministry of Agriculture. These 3 organisations are helping Practical Answers by providing information that Practical Action does not have sufficient information about. An informal partnership was developed with the Society Development College at Kassala University.

In Darfur the Practical Answers project created partnerships with Oxfam GB who are providing the project with useful information and data related to livelihoods and protection. On top of this Practical Answer in North Darfur has formed a partnership with the Ministry of Agriculture which is supplying information such as the annual rainfall figures in Darfur.

More efforts are needed to promote Practical Answers' activities (awareness building) among all potential partners. Recent experiences of Sudan (collaboration with mass media and universities), Peru (private sector), Bangladesh (NGOs and INGOs), Kenya (joint project with NGOs in Kenya and Uganda) need to be shared and discussed by the international Practical Answers team. This needs to be balanced with the ability to deliver the service.

The partnership building process encompasses:

1) The identification of concrete need for a partnership (for example, the expansion of services to countries not yet covered, including additional areas

of knowledge, production of diversified knowledge materials (diverse languages, contexts and formats).

2) Review of strengths and weaknesses of potential partners in the context of identified needs for partnership.

3) Assessment of the attractiveness of partnership for all parties, synergy, missions, benefits.

4) Assessment of resources (financial, human) needed for facilitating effective partnership.

5) Negotiations and conclusion of partnership agreement.

A partnership will work and be effective if all parties involved will identify a common goal and will gain tangible benefits.

There is a general agreement among Practical Answers staff that provision of training courses and exhibitions in addition to dissemination of information materials and responding to enquiries would greatly improve the impact of our services on poverty. Partnerships are necessary because of high cost of training.

3.4. How can Practical Answers become sustainable?

The sustainability of knowledge services addressing the needs of poorest communities is a very complex technical as well as social issue and should start with what is meant by sustainable in this context. The sustainability must be considered at least from two perspectives – continuity of services and financial self-reliance.

The former means constant analysis of demand for knowledge and timely delivery of appropriate materials, the latter means the identification of financial resources to cover the cost of knowledge materials production and dissemination.

Practical Answers' teams are exploring diverse approaches and modes of operations that may assure sustainability of knowledge services for poor communities.

Enquiry Services

Through the DEWpoint consortium Practical Action & Practical Action Consultants provides an enquiry service that charges for its services although this service is consequently restricted to DFID staff and associated organisations rather than people in poor communities.

The prevailing opinion is that the services should be free of charge if it is going to reach the poorest people. Financial sustainability can be achieved only in a longer time frame, when the value of services will be realized and appreciated. It means when the payment for services will bring concrete financial benefits, i.e. return of investment.

Sri Lanka carried out an analysis of cost and time required to answers technical enquiries.

Resource Centres & knowledge nodes

Commercial viability of such centre is remains a challenge, most rely on financial support from government or other external bodies.

However, some income generating activities are undertaken by resource centres. For Example: The Rural Technology Centres in Bangladesh provide knowledge service free of charge but offer the use of their facilities (e.g. computers) for small fees, for example for training and self-learning and MSSRF charge for private use of information technology while providing some core services for free.

The Peru Office started experimenting with a franchise model in August 2008. Authorized agents are using Practical Answers resources (knowledge materials) to respond to enquiries about technologies and other subjects. We expect that in time a network of francisers will become sustainable in both aspects of sustainability.

Web based information

UK, Sri Lanka, and Peru offices provide knowledge services online (websites: Practical Answers, Janathakshan, and Soluciones Prácticas). So far the sustainability of these services depends on external funding. Processing needs to be streamlined to make it more sustainable (assuming that there will not be dedicated staff to carry out this work on the long term) and broadened out for other offices to use it directly.

Infolactea, Oassis & the following business focused site from East Africa highlighted some potential for commercial funding as they are focused on business promotion.

Practical Action Publishing is commercially based and provides information at a cost

The achievement of sustainability by knowledge service is a long-term process related to the expansion of user base and achieving a “critical mass” of relevant knowledge materials. The awareness of availability and usefulness

of knowledge services and trust must be built among potential groups of users (the poorest communities and disadvantaged social groups).

The offer of knowledge services for a fee must meet rigorous market requirements – quality, coverage of relevant subjects, accessibility, and affordable price.

Embedding of Practical Answers services in design and implementation of all development projects of Practical Action and an offer of services and consultancies in the field to projects of other large organizations would provide a path for sustainability and broadening the outreach of information services.

Lesson

Partnership with national and international organisations that need to provide knowledge services to their target audiences could help achieve the financial long-term sustainability. These organisations can be charged for services provided on their behalf by Practical Answers.

3.5. How do we know what technical information is needed and what the gaps are in supply?

Sources of information relating to demand

The main source of knowledge about needed technical knowledge are statistical data collected when enquiries are made in direct contacts with Practical Answers' staff and their partners (e.g. extension workers).

Website statistics and data about users downloading knowledge materials are valuable source about demand for and gaps in knowledge materials.

Additional valuable source of information is the collection of user comments (emails) and unsolicited reviews of technical briefs.

Practical Action's "Reducing Vulnerability" international team developed a "mini-survey" of agricultural information needs in the areas of its operation. This survey seeked out people who were not currently accessing services,

thereby starting to map the potential unmet demand. This work was funded outside of the Practical Answers project. [3rd Qtr International Report]

Assessing the gaps in supply

The main challenge is to tackle diversified knowledge demands of clients although we can not serve information on everything. [Bangladesh, 2nd Qtr international report – Nov07 – Jan 08]

We need to look into gap within Practical Action delivery in comparison to overall gaps in information coverage for development issues and appropriate technology. Generally, there is broad coverage of agricultural issues and water delivery and sanitation while very few organisations are involved in Post harvest technologies or mining.

There should also be some recognition of the boundaries of Practical Action's knowledge in that it is focused on small-scale appropriate technologies some of which we do not have knowledge of. For example: although Practical Action, as ITDG, was involved in small-scale textile production there is no

longer any expertise within the organisation and covering this technology area in any depth is unrealistic. (A need for partner organisations may be highlighted by this comment). Also within topic areas that Practical Action does have current knowledge there may be issues that are not well covered. For example Agriculture is covered but it is such a big area that Practical Action can not cover all aspects. This can be identified by looking at past enquiries.

We should also consider the gaps in coverage in relation to Practical Answers geographical coverage. This could be considered on the international scale and on the community scale. Again, this could be considered in relation to service providers overall rather than looking at Practical Answers in isolation.

Internationally, Practical Answers is focused on its office regions but is not restricted to these regions and can provide information to intermediaries in other regions

Should we aim for comprehensive coverage or restrict information provision to country office regions?

What regions are least well served in terms of technical information and what can Practical Action do about it even if a gap is identified.

The main challenge in demand and gaps analysis is to foresee emerging needs. A broader analysis of markets (in particular agriculture, food processing and energy sectors) is required in this case.

The gaps in supply are signalled mainly by follow up procedure in Technical Enquiries Service.

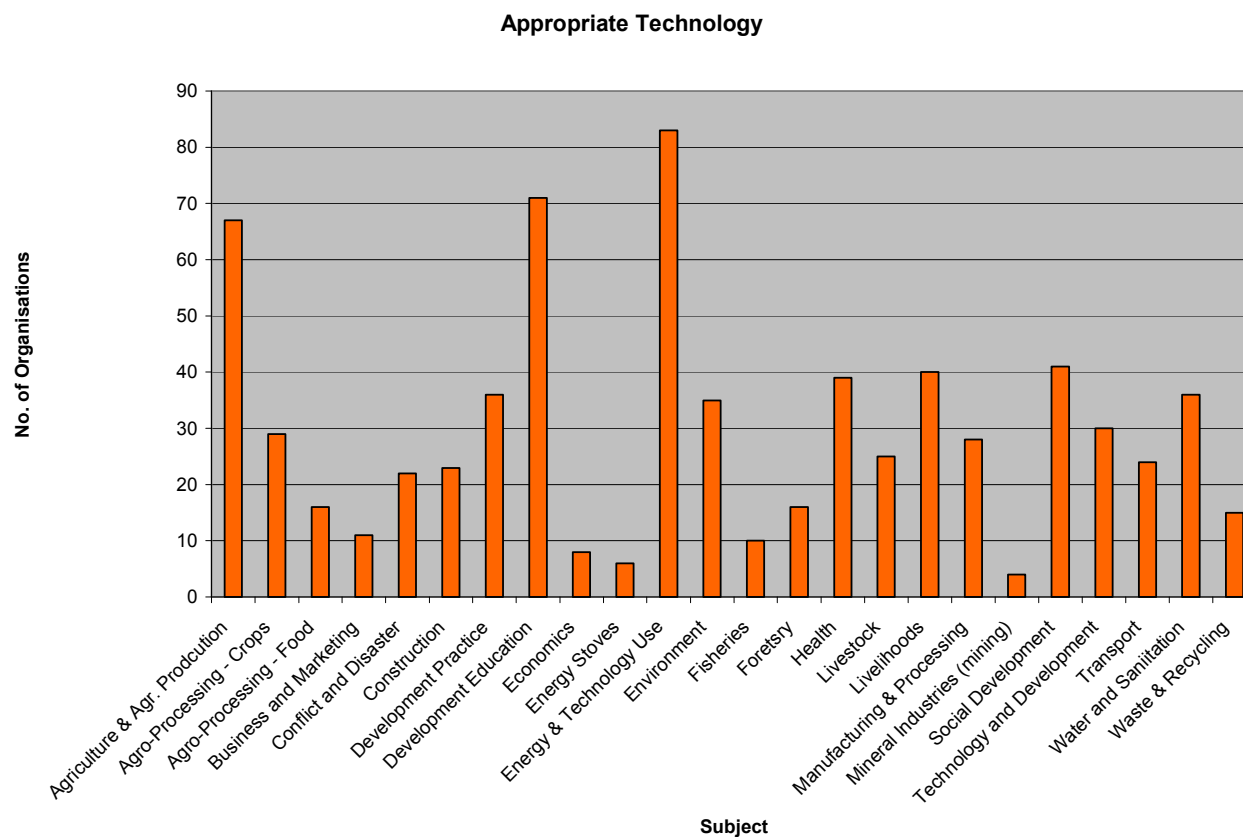
We need to develop better linkages with communities to identify real needs for knowledge materials. There must be genuine partnership with communities in identifying current and potential needs for knowledge materials and in the production of these knowledge resources.

A systematic collection of data over longer period of time is needed to identify demands for technical information and gaps in supply of knowledge materials.

We need more consistent model of data collection across all offices. Demand will be different for different locations. Practical Action will need to cluster knowledge to take into account the various demand portfolios such as rural areas prone to drought or mountainous areas.

We need to learn about needs and gaps from other organisations and individuals working in the field.

The following chart is based on the Practical Answers contacts data within the UK office where development organisations were assessed in terms of their main activity areas and marked against the subjects that Practical Answers covers. The totals were added for each theme to determine the best and least represented areas.



The chart indicates that agriculture and energy technologies are well catered for by development bodies while subjects such as food processing, small scale

mining and stove technology were least less well catered for. This might suggest areas to focus on for Practical Answers

3.6. Which formats of knowledge materials are suitable for delivery to different user groups?

Practical Answers team has experimented with diverse formats of knowledge materials.

Research by Practical Action Sudan suggested that efforts should be directed towards adoption of demonstration as means of presenting knowledge, since audience will obtain a greater appreciation of the knowledge presented and are more likely to make use of it.

In Katepola, Sri Lanka they have worked with the community to develop their information material into podcasts. The community identified the information to be developed and then appointed a panel comprising of village leaders to collect the identified information. [Sri Lanka 2nd Qtr International Report].

20 promoters, 5 students, 2 teachers and 1 guest (a director of 'Radio Agricultura' in Chanta Alta) were trained to handle video equipment and image-recording tools. [Peru 2nd Qtr International Report]

In Sri Lanka, Practical Action has been working with Uva Radio.

Practical Action started capacity building activities in development of multimedia materials in Bangladesh and Sudan.

The format that is most appropriate will depend on the recipient.

NGOs have used posters leaflets. Those who were literate took the initiative to glean information and create awareness amongst their illiterate neighbours. A lot of residents obtained information from advertisements and documentaries on TV and Radio relating to flood situations and related diseases. Booklets and leaflets are clearly more useful to better off literate people than to worse off illiterate groups in the studied communities. Folk

and drama were found to be more important to illiterate better off people, while newsletters were less effective than posters, video, radio [Final Report 2007 Bangladesh]

Knowledge products such as technical briefs and books are currently addressed to literate and educated people. This identifies that there are different audiences within for Practical Answers. Professional development workers who are literate educated people require information about appropriate technologies as they are not necessarily familiar with these technologies. These materials have reach in the sense that they are used in all parts of the world by intermediaries.

Posters, booklets and brochures with illustrations designed for communities are useful for people with basic literacy and used to study printed materials. Pictorial messaging is more useful than dense text. The use of voice, images, video clips allows for knowledge presentation to illiterate people and diverse groups of people who understand only their mother's tongue.

Mass media offers effective channels for communicating knowledge. However, televisions and mobile phones are relatively scarce compared with radios. Sudan reported that radio transitions reach large numbers of people. Nomads and villagers are known to keep radios at their homes and even carry them when they are moving. It is necessary sometimes to use the local languages in these radio programs as with “Elgash” radio program in Kassala state. Village radio-based awareness raising programs were found to be more accepted by the local communities in the two states

Information and communication technologies are developing rapidly and there is a need to respond to new technologies.

- **Existing demand for technical briefs (printable format) made available online, on CD or in hard copy makes the continuation of this format of knowledge delivery sensible for professional and educated audiences while other formats of knowledge materials (e.g. multimedia presentations, traditional channels of communication) are needed to reach disadvantaged social groups**

and illiterate people (as well as engaging with existing audiences in new ways).

Practical Action has central resource centres in its main offices which provide access to a wide range of publications including Practical Action Publishing books. These centres are used by NGOs and academics (including students) but they are felt to be important parts of the overall mix of information provision and can act as a focus for development professionals and improve Practical Action's position within this professional community. The comparative merits of each resource centre / Library have not been investigated.

Lesson

There is a need for diversification of formats of delivered knowledge materials including materials suitable for people with little or no formal education, or even for people who are illiterate. The process of developing these knowledge materials should include local community members through

the various stages from identifying the needs, creating material and assessment and evaluating the results.

4. Learning about impact of access to technical information services

This report concentrates on the impact of Technical Enquiry Service (TES) that features direct contacts (mail, email, website, telephone, visit to resource centre, meetings in the field) between enquirer and Practical Answers' officers. A customized collection of knowledge materials is prepared and delivered to the enquirer in response to an enquiry.

The impact assessment aims at answering the following specific questions concerning the learning goals stated in the proposal to DFID:

- (6) What sort of marketing can we use to promote the service to increase its impact?**
- (7) How do we make mass - web based materials have greater impact?**
- (8) Which of our client groups (enquirers) have the most impact on poverty?**
- (9) What forms of "accompaniment" are most effective. What are the costs and benefits of "accompaniment"? Can accompaniment be achieved**

through partners? What support is needed so as to build the capacity to provide high impact accompaniment?

(10) How can we improve our internal working to increase impact on poverty.

The purpose of impact assessment is to improve Practical Answers' services from the perspective of their contribution to poverty alleviation.

In general, the process of impact assessment includes:

- **desk studies (including analysis of data and reports about TES collected in last 2 years)**
- **sample field studies (including special studies and surveys from Country Offices)**
- **baseline impact study (a synthesis of studies and surveys that will provide assessment of current impact, and the potential for improvement).**

The studies and analysis concern the impact at different levels – individual, household, group, and community. Representative types of users and current methods of acquiring and application of knowledge will be identified in cooperation with Country Offices.

The synthesis of assessment of impact of technical knowledge products ought to be presented in a broader context of other knowledge sectors relevant to poverty alleviation such as local and global market, supply chain, financial services, administrative regulations, government services, human rights, intellectual property rights, and employment opportunities.

The statistical data about TES allows for producing summary and statistical quantitative reports such as number of enquiries per country, region, subject, type of enquirer. These reports may indicate directions for further investigations leading to the indicators of impact of TES.

For example, a significant number of enquiries about technologies for water purification in a certain region may indicate that Technical Briefs were

needed and useful in solving the problem. In this case we may look at the indicator/evidence of usefulness of technical assistance based on Practical Answers' information materials. The indicator will be based on statistical data as well as reports from missions to the region, testimonies from local population, and if possible, data from WHO surveys indicating the decrease of number of cases of water-bourn diseases.

We must keep in mind that the collection of data and in particular meaningful impact assessment are costly procedures. The investment of financial and human resources must be justified by the improvement of services and therefore greater positive impact.

The main objective of impact assessment is the confirmation or refutation of the conclusion that long-term effects produced by Practical Answers contribute to poverty alleviation and improvement of livelihoods.

Country Offices continued the exploration of diverse approaches to impact assessment and obtaining feedback. The following conclusions examples and conclusions illustrate their efforts:

Interviews were held with 8 micro dairy farmers on the use of means of communication, information and the Internet (Infolactea portal).

Sri Lanka office carried out the analysis of cost and time required to answers technical enquiries.

Experiences in getting feedback highlight the following issues.

Follow ups tend to generate further enquiries. Sometimes it can take long to get feedback but if the enquirers have benefited from the information you have given them they will eventually come back to you. It is important to make a follow-up with the enquiries handled; at this time you are able to offer further advice. [Kenya 2nd Qrt Internatioanl Report Nov 07 – Jan 08]

More ‘know how’ support require at field level during follow up.

Staff time for follow up was a factor.

people are not very used to giving ratings, etc. Our feedback is based on one-to-one feedback received by the field staff and partners and based on their suggestions ...”. (LK)

The information provision is not uniform in that there are regional specialisations across Practical Action. For example: Bangladesh has expertise in fish farming which is not matched in any of the other offices, Sri Lanka has expertise in Biogas that could be used in other countries. Biodiesel research in Peru would inform people in Asia. This applies to project staff and Practical Answers staff.

Practical Answers Programme in Darfur highlighted the aspect of collecting and storing feedback needs to be improved and the feedback from Kassala has been stored in a way which means that the information cannot be easily

analysed. A capacity building workshop in Kassala was used to address these issues. [Sudan International Report Aug 2007]

Practical Action needs to be able to quantify the scale of operation of impact assessment and provide appropriate resources and training to accomplish this. Current capacity is limited in this area and needs to be developed along with the information service on its more decentralised basis.

4.1. What sort of marketing can we use to promote the service to increase its impact?

The main channels for promoting Practical Answers are:-

- **mass media radio, TV, (examples of Sudan, Sri Lanka and Peru's cooperation with mass media and journalists) Newspapers, Waste Digest (Kenya)**
- **local markets**
- **participation in fairs and exhibitions (Nepal, Kenya)**
- **Internet search engines and website linking from Practical Action's sites to each other and to external sites**

- Leaflets
- Advertising in Newspapers & Magazines (Sudan) (Kenya) (UK)
- Networking

In Peru Practical Action has been involved in the production of radio programmes transmitted every week in the rural radios of Chanta Alta (“Agricultura”) and El Tambo (“Superior”).

In Darfur the Practical Answers team has set up a daily evening programme on Al Fashir radio which describes examples of technology for poverty reduction 7 provides answers the queries of audience. Subjects covered include the donkey plough, storage cooler, stoves, hand crafts and training methodology.

Sudan has arranged a 1 hour TV programme dedicated to Practical Action with the Blue Nile TV Channel – New Evening, to spread information about Practical Actions work in Sudan including the Practical Answers service.

Video material has been made by various offices including Peru which can be used in mass media or in other formats such as YouTube on the web or accessed through laptops for training purposes.

Exhibitions have proved popular in Kenya; through teh exhibitions Mr. Simon Muywe of Kayole Environmental Management Association (KEMA) has been able to get customers and has trained various groups in Nairobi and also in Uganda on waste management and plastic waste. [Kenya 1st Qtr International Report] A new experience Practical Action Nepal had in an exhibition was the participation of one of the local beneficiaries from Gatlang (the village in which Practical Action has been promoting clean indoor air). He was able to share his experiences with the visitors on how the improved smoke-hoods had helped him and his fellow villagers. [Nepal 2nd Qtr International Reprot]

In Sri Lanka in Karathivu, subsequent to a needs assessment in order to capture the indigenous knowledge of the community about their life style and livelihoods a cultural competition titled “Celebrating the Arts.” This competition gave an opportunity for the community to participate and learn

from each other. It gave an opportunity for the community from the south in Wanduruppa Hambantota to visit and learn about the culture and life styles of the community in Karathivu. [Sri Lanka 1st Qrt International Report]

Nepal took the initiative to build a strong network with other organisations and resource centres to share knowledge products and ideas. They have also taken interest in helping us to promote Practical Answers. In the recent months, we have formally started to exchange publications more widely and rigorously. [Nepal 2nd Qrt International Report]

Awareness building among communities will be important for expanding Practical Answers services and reaching directly the target groups.

Direct contact between Practical Action's and project staff with beneficiaries is important for building awareness about knowledge services and developing trust among potential users.

Technology exhibitions and participation in local community events are effective but quite expensive.

Country Practical Answers websites in vernaculars will be an important channel for promoting Practical Answers services. Our statistics show that in countries with relatively better access to Internet and knowledge of English (Kenya, Sri Lanka, India) the number of downloads of technical briefs is higher than in countries in which people do not speak English.

We need to promote Practical Answers services among large international agencies that need the dissemination of knowledge materials to support their development projects.

Lesson

Appropriate networking will play an important element to promoting Practical Answers. Networking includes international organisations and grassroots communities.

4.2. How do we make mass - web based materials have greater impact?

The bulk of material available on the world wide web is in English or other major European languages and focuses on developed economies. To counterbalance this Practical Answers has developed its web presence over recent years and the material hosted by the groups websites has expanded greatly from 2002 when the first technical briefs were included on the website. The website portfolio now includes Practical Action, Soluciones Prácticas, Janathakshan, Infolactea,

In addition to English, languages in which information is available on the internet are Spanish, Sinhala, & Tamil. Practical Action is developing a web presence in Arabic and Bangla for the end of the year 2008. Other languages will follow on once these have been established which will provide web coverage in languages that the enquiry service operates. The current web presence includes;

Janathakshan (www.janathakshan.net) The Janathakshan web portal shares practical answers to development issues. Janathakshan is a project site of Practical Action's South Asia programme based in Sri Lanka.

- Practical Action Latin America www.solucionespracticas.org.pe
- Infolactea: This field project has a geographic scope of 24 villages in Alto Llaucano river basin, located between La Encañada and Bambamarca districts (Rural Cajamarca, Peru), & in six small towns in the Cajamarca region. <http://www.infolactea.com/>

Closely related websites include

- Practical Action Consulting www.practicalactionconsulting.org
- Development Bookshop www.developmentbookshop.com
- InfoDes www.infodes.org.pe
- CEDECAP www.cedecap.org.pe
- T4SL Technology for Sustainable Livelihoods practicalaction.org/t4sl
- HEDON,
- Sparknet,

There was also bilingual English / KiSwahili website Oasis that ran for a number of years that was focused on business development. The website is no longer functioning due to the project funding coming to an end.

Linking between these internal sites, related sites and other development focused organisations websites can play a significant role in promoting Practical Answers in a targeted way.

In the past, regional and country offices wanting to place material on the group website have had to go via a single group web editor, and this can sometimes lead to delays in uploading documents and information. In addition, difficulties in communications between offices can sometimes result in areas of the website not receiving updates for considerable periods of time.

Unregulated website proliferation has in the past led to a multiplicity of Practical Action websites, resulting in a disjointed nature to our web presence. Moving from one site to another, the user gets little sense of a

group with a common ethos or brand. The establishment of individual country sites, outside of the group website, presenting themselves as the official face of the group further dilutes the brand and leads to greater confusion.

The inconsistent arrangements for the management of project sites has resulted in some sites (such as T4SL or Oasis) left without clear management and a process for updating content, which reflects badly upon the group. [International website protocols 2005]

Current websites include infolactea and Janathakshan which are two very different websites.

The Infolactea project took up the main lessons of previous technical information projects implemented by the Peru office (Infodes, Siru, Siru Podcast), which concluded that an information system would be more effective if it was incorporated into a specific production chain (knowledge cluster), gradually catering to critical agents in the chain, providing

information services that respond to the demands and needs of those productive agents. [Leaders in technical information for reducing poverty]

The site has been successful in the context of meeting the needs of the dairy sector with in the Cajamarca region of Peru, however, the target group is small compared the more general approach of the Soluciones Prácticas and consequently the impact is limited. Approaches to scaling up are an issue.

The Janathakshan website came into existence as a response to the Tsunami and was focused on post disaster reconstruction. The emphasis seems to have shifted to a more general information site more in line with the approach of Practical Answers although its direction is not clear.

Janathakshan is presenting its information in three languages and the experience in this area could be useful as Practical Answers moves into a multi lingual approach. This would make a significant difference to the operational cost.

The two sites are not directly comparable as they were created under very different circumstances although there are elements of each that can provide useful guidance to future web activities. For example: the multilingual aspect of Janathakshan or the knowledge clustering of Infolactea. Future activities should be designed to have greater consideration on how they can be assessed in relation to other approaches.

Close collaboration with local agencies in preparation of materials on relevant subjects in local languages is the main issue in reaching to potential users of Practical Answers. The website content builds upon existing materials created by Practical Action and others in more traditional printed and video formats as well as aiming to develop materials in multi media formats. For example Practical Action Southern Africa is currently undertaking the generation of technical briefs in Portuguese to support their work in Mozambique. This material will eventually be made available on the internet.

Experiences from Sudan, Sri Lanka, Peru, and Kenya (see quarterly reports) show that mass media and government officials are interested in Practical Answers' activities.

The use of local languages including dialects and languages of minorities is vital for expanding our services and reaching new audiences. Janathakshan is a trilingual portal developed using open source, and unicode local language fonts

Content has to be relevant, contextualised and aimed at addressing the needs of poorer communities within the world.

Localisation and contextualisation of knowledge materials is expensive but in the long run necessary for the sustainability and impact of Practical Answers.

The process of making information products available on the website needs to be streamlined to make it dynamic in the sense of being able to respond to changes and keeping material up to date (assuming that there will not be

dedicated staff to carry out this work on the long term) and broadened out for other offices to use it directly. Staff should be assisted in developing their skills in this area of work as there is not a great amount of experience with online information provision.

Targeted promotion of the web service to development organisations may improve the reach of the website. The following analysis shows that some organisations are not making use of the site to the extent that we might expect.

OSCommerce customer analysis 25/11/2008

33,303 customers in total

16 from Oxfam

13 from GTZ including Ray Holland

2 from Agromisa

2 from UNEP

10 from UNDP

9 from UNICEF

12 from Tearfund

0 from MSSRF

0 from ITA

1 from Vetaid

2 from SKAT

0 from Kickstart

1 from Lifewater

0 from Mali Folk Centre

0 from Pelum

16 from CGIAR

2 from Dulas

15 from FAO

19 from EWB

1 from ICRC

78 from Practical Action with some duplicates and omissions (Using hotmail address rather than Practical Action address.

1 from Soluciones Prácticas = Giannina Solari

4 from DFID – “Researching benefits, enhancements & possible alternatives to A.N. inorganic fertiliser purchase & free distribution in Zimbabwe through DFID's PRP phase II.”

1 from ActionAid

6 from WaterAid

OSCommerce customer analysis 23/Dec/2008

0 from Kickstart

89 from Earthlink

1 from cropdevelopment

1 from Bess for Development

1 from ALIN

1 from ICIMOD

1 from Enterprise Works Worldwide

1 from UNHCR

1 from ILO

1 from Parry Associates

3 from Appropedia

2 from Excellent Development

5480 from gamil

4821 from hotmail

523 from aol

102 from google

193 from .gov

504 from .ac

The website has around 60000 visits a month with the 43 percent coming from search engines while 28 per cent comes from referrals from other websites. Google Analytics provides details on the websites that refer people to Practical Answers, 1250 sites generated referrals to Practical Answers for the month of September, and some of these websites are highlighted below.

Ranking	Organisation	No of referrals
	Buildsolar.com	473
	Chiark.greenend.org.uk	166

	(Wiki)	
	Practical Action Consulting	140
	PESwiki.com	118
	HandsonTV	77
	Practicalactionpublishing.com	73
28	Howtopedia	50
29	Attar.ncat.org	43
	Stepin.org	41
	Appropedia	23
	forum.softpedia.com	21
	Janathakshan	17
83	Islamonline.net	15
90	Folkcenter.net	14
92	microfinancegateway	14
100	youtube	13
101	actionforenterprise.org	12
105	lifewater	12
	Soluciones Praticás	11

	SolarOvens.org	11
130	Foundationcenter.org	9
133	livelihoods.org	9
	HEDON	6
210	Fao.org	5
	SKAT	4

These suggest that links to and from websites such as those above can be enhanced and generate more referrals to the Practical Answers website.

From Google analytics 25/11/2008 there were 201 countries that accessed Practical Answers Online in the month. Countries that did not access information were Iraq, North Korea, CAR, Chad, Guinea.

As with other standard OSCommerce setups, it is hard to get statistics on the popularity of products. The URLs generated are fragmented into “product.php” and “index.php”, and titles are not shown for each page.

Here are some statistics on popular content, excluding key functional OSCommerce pages:

Page	Views	Unique views	% exit
Homepage	499	396	40.48
The manual screw press for small scale oil extraction	141	113	58.87
How to make a rope and washer pump	87	66	56.32
A Manual on the Hydraulic Ram for Pumping Water	139	109	58.99
Energy section	65	34	13.85
Small scale vegetable oil extraction	63	59	33.33
Pumps as turbines	60	48	58.11
Water section	49	33	14.29

Building and Construction	43	27	9.30
Development practice	42	15	7.14

Exit pages are the last pages people view when on your website. Ideally you want the exit page for everyone to be checkout_shipping.php. Here are the current leaders:

Page	Exits	% exit
Homepage	202	40.48
The manual screw press for small scale oil extraction	63	60
A Manual on the Hydraulic Ram for Pumping Water	92	59.78
Small scale vegetable oil extraction	63	85.71
Pumps as turbines	60	60
How to make a rope and washer pump	58	58.62
/index.php?ID=841	30	78.95
/product_info.php?cPath=15&products_id=140	28	51.85
Hydraulic Ram Pumps: A guide to ram pump	26	63.41

water supply systems		
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Mobile browsing

XHTML is in use across the site, but practicalaction.org currently does not serve up @media handheld CSS and is not listed in mobile search.

[practicalaction.org status report - June 2008 Kevin Sedgley for Practical Action]

Table showing countries in order of number of beneficiaries for each batch download which shows downloads have greater impact in Africa and South Asia than they do in the USA or UK.

Country	Download	Beneficiaries	Ratio
Tanzania, United Republic of	381	13070	34.30446
Uganda	604	19640	32.51656
Ghana	561	18200	32.44207

Kenya	989	31140	31.48635
Nigeria	1233	38750	31.42741
Sudan	436	12630	28.96789
Sri Lanka	440	12370	28.11364
Pakistan	419	11050	26.37232
Philippines	1395	36480	26.15054
Indonesia	1312	31750	24.1997
India	4479	99450	22.20362
Thailand	445	8900	20
Mexico	517	10230	19.78723
South Africa	1384	24150	17.44942
Malaysia	778	12640	16.24679
Turkey	354	5280	14.91525
Australia	1190	15050	12.64706
Canada	857	10410	12.14702
United States	4601	53890	11.71267

United Kingdom	2723	31400	11.5314
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[UK Monthly Reporting July to Sep 2008 for DFID]

Lesson

Promotion of the website can be targeted at development organisations not currently making use of the service and can be enhanced with improved hyperlinking between the various elements of Practical Action and between other organisations will be an important element to improving impact.

4.3. Which of our client groups (enquirers) have the most impact on poverty?

The statistics from the website downloads suggest that the group that has most impact on poverty is Government, if taken as number of beneficiaries per download, followed by community groups. Individuals and then academic bodies (including students) had the least impact. It should be noted that Individuals covers those who have failed to declare their connections with organisations.

Contact Type	Download Batches	No. of Beneficiaries	Beneficiaries per download
Government	342	4690	13.71345029
Community Group	442	5274	11.9321267
National NGO	475	4919	10.35578947
Commercial	777	7615	9.800514801
International NGO	755	7331	9.709933775
Other	1306	8804	6.741194487
Academic (including students)	3357	22496	6.701221329
Individual	4306	21567	5.008592661

[UK Monthly report April to June 2008 for DFID]

Diversification of information services and content will mean that this question may be different for the various parts of Practical Answers. Bangladesh may focus on rural issues with Farmers having the greatest impact while this will not be the case for Zimbabwe with a greater industrial emphasis. The UK office working with intermediaries including NGOs will provide a different answer.

In the current data collection system the enquirers are classified according to these categories:

Practical Answers Online

Individual

Academic (including students)

Other

Commercial

International NGO

National NGO

Community Group

Government

Male

Female

Country quarterly reports

Government

Commercial

Community-based Organisations

National NGO

International NGO

Individual

Academic

Student

Practical Action Office

Other

Bangladesh Office uses the following classification of users

Farmer
Non-producer
Teacher-student
Small trader
NGO staff
Govt. staff

Male
Female

Over all Rich /High well-being
Medium wellbeing
Low well-being/poor

Based on statistics that use the above classification and some anecdotal evidence we can conclude that the client groups that have the most impact on poverty are the groups that work in the field and have direct contacts with

beneficiaries. It means the category Individual (this group includes extension workers) and Community Group.

We cannot find evidence of direct impact on poverty by the Academic groups/ Students although there should be further investigation into the indirect impact of engaging with academics and students as this influences current and future generations of development professionals or supporters of development organisations and pro development policies.

We should also consider that many universities are doing real work on the ground that has significant impact on poverty reduction and in some cases are already collaborating with Practical Action.

- **Shelterproject - Martin Centre for Architectural and Urban Studies, University of Cambridge**
- **WEDC - Water Engineering & Development Centre - Loughborough University**

- **WOT - Werkgroep Ontwikkelingstechnieken / Working Group on Development Techniques, University of Twente**
- **DTU – The Development Technology Unit, University of Warwick**
- **Pico hydro group - Nottingham Trent University.**
- **University of Zimbabwe and Imperial College - Developing Technologies worked together to produce a low cost equipment Laminar Flow Cabinet for the producing virus & fungus free cuttings for planting to produce better crops of cassava, sweet potato, garlic**

Other indirect impact will relate to supporters of Practical Action and to the thinking amongst the public in relation to development issues and the potential solutions.

Web based download information counts number of beneficiaries against client group. A clear statement can be made about the web based information although this may not be the same as enquiries.

We need uniform classifications of enquirers, subjects of enquiries, beneficiaries, and knowledge materials to derive meaningful indicators of impact and effectiveness of Practical Answers services. The classifications should be consistent for the entire international team. An overarching classification with more flexible regional sub classification is one approach to consider.

Lesson

An overall structure of classification system addressing the needs of all the regional information services should be developed to improve analysis and comparison while remaining flexible enough to cater for regional variation. This should be developed on a group wide basis to accommodate the needs of each office.

Targeted groups should remain as previously stated but with the position on governments being reviewed. Academic / student activities should

potentially be taken up by the education activities within Practical Action rather than Practical Answers. Indirect impact should also be researched as this is an unknown quantity in terms of influence in future decision makers and funders.

4.4. What forms of “accompaniment” are most effective?

From Rowley’s report:

“... that “accompanied” information sharing makes knowledge more useable and the kind of accompaniment that might be helpful:

- face to face discussions,**
- carefully edited and translated materials**
- locally rooted information,**
- visits to see the technology in practice,**
- demonstrations,**
- skills training by PA staff, and for extension workers**
- exchanges and exchange visits between different users.“**

Each of these accompaniments serves different purposes.

The most important thing that we have learnt is that it is much better to work closer with the costumers or users: if you create a kind of relationship you can identify their requirements of information better and give them a more appropriate answer. [Peru International Report Aug 2007]

“Accompaniment” is facilitated by the expansion in local knowledge nodes either implemented by Practical Action or by other government and non government agencies. This is the case for face to face discussion, locally rooted and contextualised information provision although this relies on the work of intermediaries or field workers.

“1 Um Zena is a rural farmer women, she is a members of Gedaref WDA. She enquired about the types and sources of the improved seed to help her in farming production. A linkage is made between her and Zenab National Organization which supported her with the required improved seeds. Now Zena is started farming and she expecting good production by using the technical information.” (SD)

Accompaniment includes the provision of information in conjunction with other services such as seed, humidity testing of seed, equipment hire services etc. to bolster its impact.

All country offices report on their efforts to establish effective accompaniment. They use the modalities mentioned above.

What are the costs and benefits of “accompaniment”? Can accompaniment be achieved through partners? What support is needed to build the capacity to provide high impact?

Accompaniment is a critical factor in improving the effectiveness and efficiency of Practical Answers. The main issue is the cost of accompaniment and balancing the cost with expected results.

Examples of training include:

20 promoters, 5 students, 2 teachers and 1 guest (a director of ‘Radio Agricultura’ in Chanta Alta) trained to handle video equipment and image-recording tools. [Peru 2nd Qtr International Report]

Capacity building on the management of information was carried out through a training workshop for 20 Community Resource Centres. In addition to training each centre will get one General Packet Radio Service (GPRS) mobile phone which will enable them to access internet hence Practical Action information like the Technical Briefs. [Kenya 2nd qtr International Report]

We have learnt that it is very important to specialise the information offer as much as possible. Users prefer to find information about the topic of their interest all in the same place.

Lesson

The most appropriate accompaniment will depend on the circumstances and the user. There is not one approach that fits all situations but training was rated highly by the majority of offices as an effective way of building capacity.

4.5. What delivery structures are most effective?

Practical Answers has been working to expand the number of resources centres that it has direct involvement with as well as improving linkages to increase its indirect involvement in knowledge centres managed by other organisations and government bodies.

Practical Action Bangladesh has linked with the Rural Technology Centres (RTC) which are funded by the Government. Another 4 NGO based Libraries (Community Development Library, Dhaka, Documentation Centre of SHED NGO, Dhaka, CARE Library and South Asian Regional Cooperation-Agricultural Information Centre, Dhaka) have been identified form a knowledge consortium to establish resource centre linkage. A nationwide network named Bangladesh Telecentre Network (BTN) has been formed and Practical Action Bangladesh is a part of this platform. It has created an opportunity for us to maximize the reach of TES through partners.

In Kenya Practical Action has been working with Community Information Centres and providing support material to these centres based on consultation with some informediaries and other knowledge providers like

Arid Land Information Network (ALIN-EA), Kenya National Library Service (KNLS) and AfriAfya it was found that intermediaries lack of appropriate information and need proper management of information. This was addressed by providing locally published Practical Action material and some e-materials i.e. Appropriate Technology Knowledge collection (CDs) which are highly valued in community resource centres. [Kenya 2nd Qtr International Report]

A new resource centre has been established in Rasuwa Nepal which Practical Action supported with the provision of appropriate knowledge products. [Nepal 2nd Qtr International Report]

In Peru a Rural Information Centre has been established in Yanacancha Baja, covering enquiries in stockbreeding issues to improve milk production and Soluciones Prácticas is now working with CINER (the Bolivian organisation) to increase its reach.

Practical Action South Asia has worked with Common Facility Centres (CFC) with facilities covering collection and marketing of local produce, fair price shop, agricultural service centre with tools and implements, cycle repairing shop, local forest produce and trading centre and provides training for developing entrepreneurial and income generation skills creating Community Information Centres (CIC) within the CFCs. In the extension of Practical Answers project to India, Practical Action used the already established CICs, in partnership with IRMA-India, to understand the information needs of the communities and to run a pilot project by providing Practical Answers through an offline methodology. [SL 2nd Qrt international Report]

Practical Action Sudan has started collaborating with the Sudan University of Science and Technology, the Institute for Family and Community Development in Khartoum and Kassala Women Development Associations Network to development Knowledge Centres in Darfur, Kassala, and the Blue Nile regions.

Practical Action Sudan is also developing its knowledge node approach to information provision with its partners in areas such as Kassala.

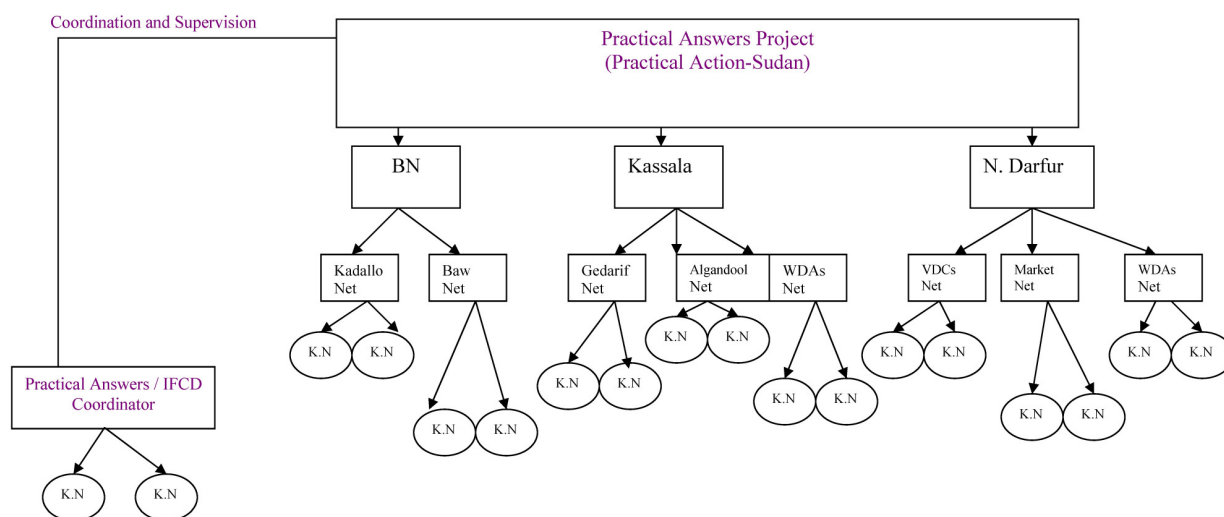
- **The service will be a network rather than a hierarchy, which includes feedback loops.**
- **The service will disseminate knowledge rather than information. It will achieve this through greater contextualization of information.**
- **Partners or local volunteers will work as infomediaries who cover the “first mile” and can deliver the knowledge to where it is needed.**
- **Feedback loops will help Practical Answers to learn from the experience of practitioners throughout the world.**

To achieve our objective the knowledge node must be provided by:

- **Mobile generator where there is no electricity supply.**
- **Chairs and table where needed**
- **Mobile phones for the volunteer who haven't got one**

- Provision of stationary and working support materials of the knowledge nodes.

Practical Answer Decentralization in Sudan
Project working relations diagram



In Zimbabwe the service was initially only operating from the Harare office, while enquiries were received from individuals and organisations outside Harare. Feedback pointed to the Resource Centre’s inaccessibility and

decentralisation of the service to the sub offices in Gwanda, Bulawayo, Mutare and Plumtree was started. Establishment of a Resource Centre in the Mozambique office has also taken place.

Steve Hunt (PAC) visited the MSSRF in India which demonstrates a successful nodal network for information exchange. He reported some of the critical factors that have made this knowledge network successful which are helpful for comparative purposes.

MSSRF has a central office that carries out research and supports Village Resource Centres which in turn support Village Knowledge Centres run by knowledge officers who can upload information as well as access information across the network using the Open Knowledge Network software.

Decentralised knowledge centres are important for knowledge service but appropriate service character from this type of centre not yet fully understood among many promoters. Such centres can be linked with private,

public and local government sector. [Bang 2nd Qrt International Report Nov 2007 – Jan 08]

Lesson

The operational model of Practical Answers should include further decentralisation of services, networking into existing resource centres and knowledge nodes will enable Practical Answers to effectively decentralise

4.6. What can we learn about quality assurance?

Quality of knowledge products needs to be maintained. There is a need for continuous updating and upgrading of technical briefs and expanding to new subjects. Other knowledge products are also needed that can provide more in depth knowledge on a subject.

Validation of information is an issue, with information used in Practical Answers and with projects generally. No quality assurance structure exists at

present that tests the quality of the information generated by Practical Action within its Practical Answers service or in a wider context. How do we determine the quality of a technology?

Information needs to be kept up to date. Referrals are not always useful as contact information can become outdated very quickly.

Improve relationships with appropriate organisations and within the Practical Action organisation would help in bringing in appropriate expertise. Some sort of resource allocation to this activity would help.

There is a capacity issue with project staff that will limit the amount of time dedicated to this task.

4.7. Learning about the Environment in Which Practical Answers Operates

How can we improve our internal working to increase impact on poverty?

The internal working of the Practical Answers team was one of the main topics of the Sri Lanka workshop (January 2008) and is the topic of ongoing electronic discussion. Workshops that brought together the entire Practical Answers team has been a vital step in the integration of the International Team. Regular face-to-face meetings (at the minimum every 2 years) will be very important in integrating the team and developing common understanding of issues concerning Practical Answers. This need is highlighted in the review of reporting categories carried out by Practical Action Bangladesh which would have benefited from being discussed on a group wide basis to ensure uniform reporting and enable comparative studies to be made.

The involvement of project staff in knowledge materials preparation based on project experiences should help improve the quality of knowledge materials and responsiveness to real needs. The integration with project activities is needed.

Upgrade capacity of a library staff to establish a user demand oriented library and resource centre service. [Bangladesh, 2nd Qtr International Report – Nov 07 – Jan 08]

The project manager is planning to organise in-house training workshops (3, one each office) to upgrade the ability of the project staff & the volunteers for better performance for the Practical Answer activities. [Bangladesh 1st Qtr International Report]

In Sudan most of the knowledge providers surveyed informed that no specified training has been conducted for the staff in the field of communication skills development. [Knowledge Gap Survey 2008]

In both of our regional offices Practical Action has set up a focal point to record and respond to technical enquiries. We believe this will help in building further network with other organisations/ resource centres in those areas. [Nepal 2nd Qtr International Report– Nov 07 – Jan 08]

Usage of an offline repository: A software has been developed named “Query Keeper” for proper management of query from the people / organizations on various issues This software contains a user ID and password to differentiate usage from different centres. The software records following information about a query: Enquirer details like name, age, sex, village, block and the query asked.

The software also contained a database (in local language) on various contents such as: agriculture, health, education, livelihoods, and animal husbandry to name a few (see content list for complete details). Based on the query, the enquirer is given the information / contents by the CIC managers, who have been trained to answer the queries.

Based on the above-mentioned information, the software generates reports indicating number of person visiting the centre daily/ weekly/ monthly and details about different queries, remarks on level of satisfaction etc. this information, collated over three months have become the basis of community information needs report. [SL 2nd Qrt International Report]

The integrated database for technical enquiries was intended to improve the internal working on this aspect of Practical Answers, however, the impact of an fully functional integrated database will be limited and should not be regarded as a panacea.

SharePoint has improved documents sharing to some extent in obtaining documents from other offices, Practical Action Sudan has made technical briefs available to be used on the Practical Answers website, however, access is limited which restricts the impact it can have and driving staff to alternative communication channels.

The activities of Practical Answers are not only going in parallel with the other Practical Action interventions, but they interface in the way of enhancing, promoting and refining knowledge delivery and provision process. The delivery mechanism of the Practical Answers project seems to be not easily understood, because it follows an innovative and untraditional method

in knowledge provision and relation with other interventions in the same organization. [Sudan Knowledge Gap Survey 2008]

There should be a drive towards greater cross pollination to improve coverage response and to assist project personnel in their work. This would be in the form of an Internal Practical Answers mechanism. Options are currently being investigated.

The main aspects of the improvement of internal working of the team are:

- allocation of staff in Country Offices**
- clarification of responsibilities of Practical Answers team members**
- regular communication between all members of the International Team**
- professional skills development (production of knowledge materials, effective communication, and analytical skills in regard to poverty problems)**
- closer collaboration with AIMs and local development projects in order to better understand the needs for knowledge materials and methods of their delivery.**

Lesson

Practical Answer should improve its integration into the other activities of Practical Action project staff and partner organisations. This should be reflected in project design at the initial stage and become part of a project exit strategy which would allow Practical Answers to improve the indicators that show the contribution of Practical Answers activities to the organisational objective of reducing poverty. The concept of an Internal Practical Answers is currently being discussed with aims members to bring together the broader Practical Action community is an important aspect of effectiveness.

Trends that need to be responded to

New technologies increase the options on how people communicate to each other and how organisations work. For example; peer production has been described in Wikinomics by Tapscott & Williams.

Practical Answers needs to continue to research and implement new technologies. There are currently a wide range of innovations taking place and being tested in the field. Practical Answers should ensure that it is aware of these developments and monitor their effectiveness, such as SMS mobile phone communications and the Spoken Web developed by IBM Indian Research Laboratory.

However new technologies require new learning by users and potential users and therefore training will play a significant role in ensuring best use of new technologies.

The developments in ICTs are changing the way people work and this can be an advantage to an enterprise such as Practical Answers. Peer production and review is increasing in response to greater communication networking.

More awareness of our operational environment can be gained from the experience of others. There is a lot of writing on the subject of ICTs and their impact that could be used to assist in this. Practical Action Publishing is a

useful resource. Some form of exchange between Practical Answers staff could also assist in this area.

Environmental issues are becoming more significant within Practical Action as well as with people in poverty. How do we respond to this? One consequence of this is the restriction on travel although there wasn't much travel to start with. However, the introduction of tele-conferencing could be useful in bring the international team together. The new area of Adaptation to Climate Change demonstrates a response to this issue.

Economic considerations are also important and the current economic downturn may restrict the impact of the service. Knowledge is only useful if there are resources to implement it.

5. Conclusions

Existing activities in diversification & decentralisation with the expansion in the number of resource centres or knowledge nodes should continue. New technologies should be tried such as mobile phone communication. There needs to be some recognition of the existing limits and constraints with such a service.

Collaboration between organisations (international and local) is essential in broadening the information available. There are a number of options on how this should develop but as yet is undecided.

Knowledge delivery

Greater attention should be paid to government organisations as the potential impact is large. Previously this sector was not a target for Practical Answers as they were thought to have sufficient funds and access to information not to require assistance from Practical Action. Students are not part of the target group of Practical Answers and should potentially be taken

up by the education activities within Practical Action rather than Practical Answers. Indirect impact should also be researched as this is an unknown quantity in terms of influence in future decision makers and funders.

Knowledge requirements will be dependent on the particular location geographically and on their own circumstances and on which category of enquirer they are from but there is a need for in depth knowledge for people putting ideas into practice. This needs more work. Language is an important element in this although there has not been much testing of the multi lingual approach.

Diversification of information delivery systems and products is needed to improve reach but diversification of accompaniments will also be beneficial; knowledge along side seed shops or in collaboration with micro credit services.

Information should be packaged to suit users requirements thus combinations of information types and subject matter would be produced

depending the individual circumstances. For example; production techniques in combination with business guidelines, equipment supplier information, market intelligence and links to micro credit resources.

Suggested areas of information requirements to include are:

- **Get a list of trainers who can undertake training in simple technologies whom we can reference in future (Kenya)**
- **Commercial suppliers (various)**
- **Information on other development organisations and information resources providing linking opportunities (UK)**

Web

User focused knowledge clustering within Practical Answers will make information more relevant and will improve access to knowledge and the application of that knowledge.

Some convergence between the various web sites would improve the Practical Answers identity and focus. Does Janathakshan aim to be the Sri Lankan version of Practical Answers?

There are many opportunities for greater user participation using web.2 technologies.

Promotion of the website can be targeted at development organisations not currently making use of the service and can be enhanced with improved hyperlinking between the various elements of Practical Action and between other organisations will be an important element to improving impact.

Internal working

Internal Practical Answers structure (an internal wiki) would improve the internal working of Practical Action. SharePoint has had limited impact in this area due to access problems but has demonstrated its potential in isolated instances.

Impact has been difficult to measure and requires planning and resourcing. Lesson learning and measurement of impact is an important element of the service and should be done on a continual basis. (A lesson learning internal wiki might bring closer collaboration in this area). The lesson learning process should be further developed as an integral part of Practical Answers and should include the failure as well as the success stories. There has been little reporting of things that have not worked.

Practical Answers should integrate more with aims teams in terms of project approach and planning. This should be reflected in project design.

Training for intermediaries / field workers / and community members and Practical Action staff is required to enable people to become more effective in delivering services.

Distinct allocation of resources to tasks such as impact assessment, quality assurance etc should be integrated into the planning. It should be clearer who has responsibility for each element of Practical Answers.

Learning

There is a need for continuous learning and assessment being incorporated into the structure of the project at the design stage enabling comparisons to be made between different approaches.

6. References

- **Connecting the First Mile.**
- **International Report – 1st Qtr Aug 07 – Oct 07**
- **International Report – 2nd Qtr Nov 07 – Jan 08**
- **International Report – 3rd Qtr Feb 08 – May 08**
- **International Report – 4th Qtr June 08 – Aug 08**
- **A primary Analysis of the Technical Inquiry Service: February – April 2008 quarter**
- **Final Technical Report – 2007**

- **Knowledge Gap Survey Dr. Abdelaziz Karamalla Gaiballa September 2008**
- **Leaders in Technical Information for Reducing Poverty: First Latin American meeting sharing experiences of information systems using a productive chain approach by Doris Mejía, Maria Sol Blanco, Giuliana Miranda**

Appendix A: Samples of TES country reports

Quarter 4 Statistics (all offices)

Number of Enquiries	
Bangladesh	300
Kenya	121
Nepal	33
Peru	238
Sri Lanka	152
Sudan	114
UK	135
Zimbabwe	65
Total	1158

Enquirer Category	
Government	75
Commercial	89
Community Based Organisations	9
National NGO	137
International NGO	85
Not specified	65
Individual	551
Academic	132
Others	9
Practical Action office	6

TOTAL	1158
--------------	-------------

Theme	
Agricultural Production	16
Agriculture	163
Agro-Processing - Crops	34
Agro-Processing - Foods	99
Business and Marketing	28
Conflict and Disasters	5
Construction	50

Region	
Eastern Asia	1
Eastern Africa	147
Eastern Europe	1
Latin America and the Caribbean	302
Melanesia	
Middle Africa	4
North America	12

Development Practices	45
Development Education	2
Economics	3
Energy Sector	56
Energy - Stoves	12
Energy Technology Use	193
Environment	15
Fisheries	34
Forestry	5
Health	7

Northern Africa	115
Northern Europe	26
South-central Asia	49
South-eastern Asia	408
Southern Africa	73
Southern Europe	2
Western Africa	14
Western Asia	3
Western Europe	1
TOTAL	1158

Knowledge & Learning	33
Livestock	108
Livelihoods	9
Manufacturing and Process	57
Mineral Industries	5
Social Development	28
Technology in Development	29
Transport	4
Water and Sanitation	118
TOTAL	1158

Quarterly reports from offices include also narrative reporting about learning about demand from data analysis and direct interviews with beneficiaries and infomediaries. The excerpt from Peru report illustrates

“Between April 2008 and June 2008, our web site was visited 48566 times. In total, 5747 registered documents were downloaded, between technical records, publications and developed technologies (this number only indicate registered downloads). Of the documents downloaded during the last three months, 2384 were publications, 1734 were developed technologies and 1629 were technical records. Of the users who downloaded our documents, 2324 were academics, 1163 were micro entrepreneurs, 1010 were classified as ‘others’, 489 were NGOs, 470 were producers and 291 were from the government sector.

The downloaded information is mainly used as follows: of the total number of users, 2235 downloaded the documentation for research purposes or studies, 2130 for designing projects, 622 to improve some product and 760 for other uses.

The information is mainly used in rural areas. Of the total number of users, 3222 will use the information in rural areas, 2007 in urban areas and 518 do not specify where it will be used.

As regards the number of beneficiaries, statistics show the following: 2040 users who downloaded information from the web page will use the information for the benefit of between 1 and 5 people, 1277 users will benefit more than 50 people, 1031 will benefit between 6 and 14 and 969 will benefit between 15 and 50 people.

This information on our users helps us determine the kind of information in most demand, so that we can decide what new materials to produce. Of the documents most frequently downloaded from the web page, 2084 documents are related to agro-industries and 1743 documents are energy-related.

The feedback received from users who visit the web site and download the documents mainly consists of remarks about the extensiveness of our web page, congratulations on the information it contains and requests for further information regarding a certain subject.”

Appendix B: Website statistical reports (osCommerce)

Comments

It will serve to us a refernces

Jescherian Dela Cruz -

September 23 2008

Beginning steps of investigation. the process could assist many people.

Elavarasan Murugan -

September 22 2008

Powering electric driven vehicle. looking at expanding range and charging options of electric cars

John Hodnefield -

September 20 2008

For development of a local training design on the subject

Gil Cagalawan -

September 19 2008

We'll use the materials in developing training modules for non profit usage

Gil Cagalawan -

September 19 2008

The requested technical briefs will be used in the enhancement of our training to capacitate our partner peoples organization in the poor rural communities in Mindanao, Philippines.

Gil Cagalawan -

September 19 2008

Information to be used in a briefing of individuals who may be interested in developing a Virgen Coconut Oil business here in Brazil.

John Yohnses -

September 17 2008

Intend to develop technical knowledge

OGUZ NUR -

September 17 2008

The Limapela Foundation Cedric School project in Zambia is due to start in

2009.

Matthew Raymond -

September 17 2008

Trying to help a home scale aonla preserve manufacturer

Dinesh Pandey -

September 17 2008

Our project (The Limapela Foundation Cedric School Project in Zambia) is still in the planning stages with a view to starting in 2009.

Matthew Raymond -

September 17 2008

For non profit usage in africa

Peter Drennan -

September 16 2008

We are a Field Archery club that is interested in green issues

Paul Roberts -

September 16 2008

We are looking at recycling in the developing world as a project

Caroline Medicott -

September 16 2008

General interest in bicycle use as part of transportation infrastructure.

Joseph Musco -

September 16 2008

I use the information provided to get started with a project concept in rural (small community school and hospital) Senegal

Ruth Scheidhauer -

September 13 2008

To share the knowledge in the rural areas in my state. Thanks for the enrichment.

Idosa Arekhandia -

September 13 2008

I hope to share this knowledge in the rural areas in my state. thanks for sharing this information with me.

TECHNOLOGY THEME REPORT		
THEME	DOWNLOADS	~NO. OF BENEFICIARIES
Solar Energy	7765	137320
Nut Processing & Oil Products	6949	118540
Adaptation to Climate Change	5493	109530
Water Pumping & Drilling	5450	103530
Water Collection and Irrigation	5373	107110
Rainwater Harvesting	4704	92730
Drying	4015	71280
Wind Power	3990	61340
Fruit & Vegetables	3763	72320
Waste and recycling	3722	67700

ALL ARTICLES		
ARTICLE	DOWNLOADS	~NO. OF BENEFICIARIES
Rainwater Harvesting	8874	175270
Oil Extraction	3279	56730
Wind Electricity Generation	3058	49780
Solar distillation	2920	51420
Solar (PV) Energy	2427	47220
Handpumps (human-powered water lifters)	1888	36520
Solar Drying	1600	27270
Compost Toilets	1578	30280
Run-off rainwater harvesting	1515	30930
Hydraulic ram pumps	1393	23870

Downloads by contact type

CONTACT TYPE REPORT		
CONTACT TYPE	DOWNLOAD BATCHES	~NO. OF BENEFICIARIES
Individual	19758	232320
Academic (including students)	16149	225010
Other	5343	82020
Commercial	4010	69710
International NGO	3171	72730
National NGO	2140	52220
Community Group	1902	47610
Government	1799	41060

Best Viewed Articles

No.	Articles	Viewed
01.	Oil Extraction (English)	60316
02.	Wind Electricity Generation (English)	52322
03.	Rainwater Harvesting (English)	50122
04.	Recycling plastics (English)	41594
05.	Water Hyacinth (English)	41367
06.	Solar distillation (English)	26504
07.	Solar (PV) Energy (English)	25497
08.	Compost Toilets (English)	24693
09.	Essential Oils - Small-scale Production (English)	23634
10.	Sugar Production from Sugar Cane (English)	23002
11.	Cashew Nut Processing (English)	22901
12.	Recycling of Organic Waste (English)	21842
13.	Solar Thermal Energy (English)	21727
14.	Cocoa & Chocolate (English)	21628
15.	Bicycle Trailers (English)	21370
16.	Food Poisoning and its prevention (English)	21173
17.	Hydraulic ram pumps (English)	20753
18.	Handpumps (human-powered water lifters) (English)	20472
19.	Solar (PV) Water-Pumping (English)	20438
20.	Mushroom Growing (English)	19961

Displaying 1 to 20 (of 274 products)

<< Page 1 of 14

Article Downloads

No.	Articles	Downloads
01.	Oil Extraction	3863
02.	Wind Electricity Generation	3531
03.	Rainwater Harvesting	3401
04.	Solar (PV) Energy	2613
05.	Handpumps (human-powered water lifters)	2101
06.	Compost Toilets	1902
07.	Hydraulic ram pumps	1684
08.	Solar distillation	1675
09.	Essential Oils - Small-scale Production	1556
10.	Solar (PV) Water-Pumping	1503
11.	Recycling plastics	1463
12.	Mushroom Growing	1278
13.	Solar Water Heating	1276
14.	Micro-Hydro Power	1265
15.	Recycling of Organic Waste	1200
16.	Refrigeration for Developing Countries	1174
17.	Sugar Production from Sugar Cane	1145
18.	Soapmaking	1123
19.	Biogas	1010
20.	Recycling of Rubber	974

Displaying 1 to 20 (of 264 products)

<< Page 1 of 14

Downloads by Country of Use

Start Date 2006-01-01 End Date 2008-07-25

No.	Country	Downloads
01.		23843
02.	Afghanistan	521
03.	Albania	191
04.	Algeria	212
05.	American Samoa	136
06.	Andorra	17
07.	Angola	154
08.	Anguilla	66
09.	Antarctica	18
10.	Antigua and Barbuda	42
11.	Argentina	324
12.	Armenia	17
13.	Aruba	15
14.	Australia	2175
15.	Austria	57
16.	Azerbaijan	16
17.	Bahamas	36
18.	Bahrain	39
19.	Bangladesh	435
20.	Barbados	58
21.	Belarus	13
22.	Belgium	108
23.	Belize	113
24.	Benin	139
25.	Bermuda	34

Downloads by Country of Origin

Start Date	End Date	<input type="button" value="update"/>	
No.	Country		Downloads
01.			3
02.	Afghanistan		175
03.	Albania		15
04.	Algeria		68
05.	Andorra		3
06.	Angola		24
07.	Antigua and Barbuda		25
08.	Argentina		359
09.	Armenia		12
10.	Aruba		9
11.	Australia		3306
12.	Austria		310
13.	Azerbaijan		18
14.	Bahamas		19
15.	Bahrain		105
16.	Bangladesh		431
17.	Barbados		57
18.	Belarus		2
19.	Belgium		308
20.	Belize		60
21.	Benin		41
22.	Bermuda		6
23.	Bhutan		11
24.	Bolivia		233

TES Database Report

Report Manager - Windows Internet Explorer

http://hdg-uk-tes-01/Reports/Pages/Report.aspx?benPath=%2FTE5%2FITDG

Report Manager

Home > TES > ITDG

Search for: Go

View Properties History Subscriptions

New Subscription

Start Date: 01/02/2008 End Date: 01/03/2008 View Report

100% Find | Next Select a format Export

ITDG Monthly Report Period : 01/02/2008 to 01/03/2008

Type	Name	Total
Enquirer Class		31
	<input type="checkbox"/> (Unknown)	2
	<input type="checkbox"/> Academic	4
	<input type="checkbox"/> Commercial	3
	<input type="checkbox"/> Community Based Organisation	1
	<input type="checkbox"/> Individual	15
	<input type="checkbox"/> International NGO	4
	<input type="checkbox"/> National NGO	2
Region		31
	<input type="checkbox"/> Eastern Africa	5
	<input type="checkbox"/> Malaisia	1
	<input type="checkbox"/> Northern America	1
	<input type="checkbox"/> Northern Europe	12
	<input type="checkbox"/> South America	1
	<input type="checkbox"/> South-Eastern Asia	1
	<input type="checkbox"/> Southern Africa	1
	<input type="checkbox"/> Southern Asia	4
	<input type="checkbox"/> Western Africa	4
	<input type="checkbox"/> Western Asia	1
Theses		31

Local intranet 100%

Appendix C: Surveys

UK Office – Email Survey

A broadcast email was sent out to 7704 users of Practical Answers that agreed to allow us to contact them. The email was a test of broadcast email here, and contained a link to a survey asking for their experiences with using Practical Answers.

Sent out: Wednesday 28th Nov 0945

To: 7704

Bounced: 3135 (41%)

Got through: 4569 (59%)

Opened: 978 (21%*)

Clicks: 783 (17%*)

Unsubscribed: 12 (0.03%*)

Survey clicks: 173

**Surveys 79
completed:**

***as percentage of emails that got through. Results taken on 17th December.**

Survey questionnaire

Feedback request on Technical Enquiries

Did you manage to implement your project?

Was the information provided of use to you in implementing the work?

On a scale of 1 to 10 with 10 being most useful what was the most useful type of information provided?

	1	2	3	4	5	6	7	8	9	10
Technical briefs										
Manuals / books										

Engineering drawings										
Contacts/suppliers										
Additional reference material										

How many people benefited from the information provided and how what ratio were women?

Did you generally have problems finding the information you needed or were there many sources of information to choose from?

What were the difficulties that you encountered in the implementation of the work?

To improve the Technical Enquiry Service, Practical Action would like to find out how useful that information was. Please tell us how the information

contributed to your work, who else has benefited from the information, and what information was missing. Any feedback from you is very welcome.

If you have any additional information that would be useful to others, please send it to the technical enquiry service at Practical Action.

Practical Answers Online

Country of application

Number of beneficiaries

Document views

Document downloads

Comments (reasons for using Practical Answers Online and how the information might be used)

Document reviews (descriptive & rating)

Reporting will combine data in the following way

- **Total number of beneficiaries**

- **Total number of downloads**
- **Number of beneficiaries per country of application regions**
- **Downloads per country of applications regions**
- **Number of beneficiaries per technology theme**
- **Downloads per technology theme**
- **Number of beneficiaries per organisational type**
- **Downloads per organisational type**

Practical Answers Online Feedback Survey

Some time ago you downloaded some information from Practical Action's website. I'm looking back through some of the emails we had over the year to see if the information provided was useful and to determine what impact it had. To determine this I would like to ask you a few questions about how the work developed over the year.

Some of the things we are interested in finding out are:

Have you manage to implement your work / project?

Yes / No + Free text

Was the information provided of use to you in implementing your work?

Yes / No + Free text

How many people benefited from the information provided and how what percentage were women?

Drop down menu for numbers and percentage

How has our service contributed to its aim of reducing poverty?

Free text

On a scale of 1 to 10 with 10 being most useful, what sort of information would you like to see available?

	1	2	3	4	5	6	7	8	9	10
Technical briefs										

Manuals / books										
Engineering drawings										
Contacts/suppliers info										
Additional reference material										
Graphics, Pictures and sketches										
Videos										
Audio										

Free text

Did you generally have problems finding information you needed or were there many sources of information to choose from?

Free text

What other information would have been useful?

Free text

What were the difficulties that you encountered in the implementation of the work?

Free text

To improve the service, Practical Action would like to find out how useful that information was. Please tell us how the information contributed to your work, who else has benefited from the information, and what information was missing. Any feedback from you is very welcome.

Free text

If you have any additional information that would be useful to others, please send it to us at Practical Action.

Free text

International Survey - Peru

Soluciones Prácticas-ITDG

Personal data

Name and surname:

E-mail:

Mobile or fixed telephone No.:

Country:

City:

Area: Rural or Urban

- 1. What information did you request from our online service?**
- 2. What do you need the information for?**
- 3. Was the information sent promptly and in adequate formats?**

Yes No

4. Was the information useful to you?

Yes No

5. How did you use the information?

6. In what way did the information provided help you carry out your project, research and/or study?

7. In which area did you implement your project, research and/or study?

8. Would you request information from us again?

Yes No

9. What is your opinion of our information service?

10. How did you find out about our information service?

11. Would you be interested in participating in a more detailed survey?

Yes No

12. Comments and/or suggestions

Impact Study Survey – Bangladesh

**Impact study Survey
(70 households, 10 % of the total Inquirers)**

Technical Inquires

Practical Answer Project, Practical Action Bangladesh

General information:

ID no:

Name :

Village:

Sub dist.:

Sex:

Age:

Education:

Occupation:

Distance from Practical Answer Field Office(km):

Distance from Local Knowledge Centre (km):

1. Put tick on the areas of impact, and mention degree of importance to you.

Area	Highly important	Important	Moderately	Less important	Not at all
Household Income					
Employment					
Social honour					
Skill enhancement					
Non-economic benefit, eg. satisfaction, happiness					

Decision making capacity					
Knowledge					
Awareness					
Knowing more about small scale technology					
Disaster risk reduction					
Advising others					
Improvement in trade					
Linkage with experts and organisation/service provider					
Increased productivity					

1.1 How do you like to explain the impact on income?

1.2 How do you like to explain the impact on employment?

1.3 How do you like to explain the impact on access to service and linkage?

1.3 Other impacts on livelihoods:

Area	Rank	Area	Rank
Food security increased		Better education of children	
Positive change in food behavior		Improved family health	

Increased use of commodities		Family peace and discipline	
Natural resource management			

1.4 Access to service providers and linkage, networking

List/tick the institutions you have got access to as a result of the TE service

Institution	Rank	Nature of benefit/engagement							
		Info rma tion	Cre dit	Te ch nic al as sis ta	Pa rt ne rs hi p/ o	M ar ket in g	S er v ic e	O th er i n s t r u m e n t s	

				nc e /tr ai ni ng	w ne rs hi p				
NGO									
Govt. Department									
Bank									
Market									
Dealer									
Educational institution/C ollege/Univer sity									
Health institution									

Union Council									
Employer									
Others									

2. Demand

2.1 What type of knowledge/information is more frequently demanded by you?

Subject	Rank	Subject	Rank	Subject	Rank
Agricultural production		Health and sanitation		Road transport	
Fisheries		Environment		Technical knowledge	
Livestock		Forestry		ICT and communications	
Food processing		Energy		Social development	

Other agro processing		Disaster Mgt		Resource Management	
Trade and marketing		Rehabilitation		Economics	
Health		Infrastructure			

2.2 What type of service did you received from area office or local knowledge centre? Rate your satisfaction

Type of service	Very effective	Effective	Modereately effective	Less Effective	No t at all
Only advice and information					

Only inputs (such as – fertilizer, seed)					
Only service (Photocopy, internet, photography etc.)					
Advice+ Input					
Input + service					
Advice+ Input+ Service					

2.3 What type of other service you expect from TE?

3. How did you apply the information you have received from TE service?

3. How many people talked about TE service or Local Knowledge Centre over the last two months?

3.4 From your opinion how did different category of TE clients/customers benefited?

Clients	Highly benefited	Moderately	Benefited	Less	Not at all	Causes
Farmer						
Non-						

producer						
Teacher- student						
Small trader						
NGO staff						
Govt. staff						
Over all Male						
Over all Female						
Over all						

Rich /High well-being						
Medium wellbeing						
Low well-being/poor						

4. Constraints of TE service delivery: Put tick

- Advice was not clear
- Knowledge material was not user friendly
- Advised material was not available/cheaper in the market
- Production cost was higher

- **Could not compete in the market**
- **Could not preserve the crop/product**
- **Was unaware of unpredicted situation**
- **Poor follow up support**
- **Negative influence by the powerful elites in the community**
- **Discouraged by the family members**
- **Lack of investment**
- **Could continue the same pace on interest**
- **Any other**

5. Which information was completely unavailable in your locality “ List three only:

Any suggestions:

Proposal for Knowledge Gaps Survey - Sudan

1. General:

Development of the communities depends on the efficiency and effectiveness of the knowledge that can be greatly used to mobilize their livelihood assets, since this knowledge contribute significantly to the improvement of livelihood practices. Slow steps in adopting appropriate livelihood means or improving existing one, will retard the rhythm of the development process, and will result in knowledge gaps, keeping communities far behind the desired livelihood practices.

2- The conceptual scope of the survey:

- The knowledge meant within the context of this survey, includes information, practices and appropriate technologies, tools and materials, experimentation and human resources skills and capacities, that can be mobilized by the targeted communities in order to improve their habitat and livelihood.**

- **The targeted communities are those who are identified as most poor, representing the end users who will benefit if knowledge become efficiently and effectively availed and used.**
- **Knowledge gap within this survey is referred to the gaps that exist between the current practices and the desired ones. These gaps are reflected negatively in the development of the targeted communities**

3- Coverage of the survey:

Data and information will be collected at different levels of the knowledge cycle, and across the different actors including the end users. The survey will deal with controlled samples from the targeted communities in Kassala and El fashir, in addition to Khartoum. The other actors will be sampled based on the depth of their involvement, to include planners, sister NGOs and other related organizations, promoters, and unions.

2. Objectives of the survey:

- 1. To identify the knowledge gaps, together with related socio-economical platform that interfere with the development process of the targeted communities**
- 2. To identify the actions required to bridge the knowledge gap, with verifying indicators and evidences of success**
- 3. To identify the characteristics of the targeted communities (audience) in relation to required knowledge transfer, adaptation and adoption.**

4. Methodology:

The proposed methodology is designed to identify the pattern and characteristics of the knowledge gaps and the nature of the actions and steps required to bridge these gaps.

a) Sampling and tools:

Based on the survey concept the sampling will:

- Address the targeted communities in defined groups (urban and rural) in Khartoum , Kassala , and El fashir,**

- **Select five livelihood practices for each group as a model**
- **Identify levels of involvements for the different actors, along each of the selected practices**
- **Adopt controlled sampling, with reliable statistical fame.**

Among the tools to be used are:

- **For the levels other than the end users, a prepared checklists with focused group discussion are proposed**
- **For the end users structured interviews and questionnaires will be used**
- **Visits for direct observations**

b)Analysis and interpretation:

For the purpose of this survey relevant analysis techniques will be used possibly to include sectors based analysis, background chaining, logical sequence building and cluster analysis. Illustrative and informative graphing and charts will be used when relevant.

7. Expected output:

- **Complete report that will contain mainly:**

- **Background of the survey**
- **Description of the knowledge gaps and their pattern and characteristics**
- **Analysis and identified indicators for the existing practices.**
- **Analysis of the practices (dynamic format).**
- **Knowledge gaps and related Scio-economical environment.**
- **Actions and steps required to bridge gaps**
- **Recommendations and future directions (with success indicators).**

In addition to necessary informative facts and figures related to the survey subject

5. Time frame:

50 days

6- Survey team:

The survey will be supervised by consultant and organized by three staff members from Practical Action country office. Selected staff representatives, one in El fashir and other in Kassala will be involved in data collection at the field level with three enumerators in each of the three sites. The consultant

will be responsible for the data analysis, interpretation and the preparation of the final report.

7- Survey cost:

This will cover the cost of the field work and related expenses including data collection in addition to consultation expenses related to supervision of the work and preparation of the survey report. Consultant fees estimated as 50% of the ordinary rate, as this survey is planned to be supervised in a cooperation process, within the strategic partnership of the Practical Answer project.

No	Items	Specifics	Cost (US\$)
1	Consultant fees	50 X100 US\$	5000

2	DSA (consultants)	3 sitesX5days X20 US\$	300
3	Data collection (Enumerators)	3 personXsitesX5daysX25	675
	Total		5975

Note:

The above budget is estimated assuming that Practical Action will take care of traveling to and from the field, transportation and accommodation.

Dr. Abdelaziez Jaib Alla

Sudan University for Sciences & Technologies

24th June 2008

Appropriate Technology

