

## **The Australian Centre for International Agricultural Research experience in international research partnerships**

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### **Abstract**

The paper presents learnings from The Australian Centre for International Agricultural Research (ACIAR) on effective communication pathways between funding agencies, agricultural scientists and in-country partners involved in international agricultural and rural development projects. The Australian Centre for International Agricultural Research is a part of the Australian Government's Official Development Assistance Program. Its charter is to commission research that leads to more productive and sustainable agriculture through collaborative projects involving Australia and developing-country partners. Communication is an essential part of agricultural research in developed and developing countries, from initiating and managing projects to evaluating the impacts of research. It is also considered fundamental to a scientist's professional life and the stakeholders they serve. It examines informal and formal communication channels such as face-to-face meetings and in-country visits, field visits and journal articles, and the use of various information and communication technologies (ICTs).

The paper also reports on factors that influence communication between program managers, project leaders, scientists and communication managers in Australia and overseas partner countries. Regular and clear communication between the Australian and partner country researchers and with the ACIAR staff in-country and Australia is essential. Bridging the cultural and distance gap, and good teams that cooperate and communicate, are key to successful projects. Increasing impact requires opening and maintaining communication beyond the academic research team. Farmers, extension agencies, Non Government Organisations (NGOs), private sector and others need to be engaged. How to do this more effectively is currently a learning process in ACIAR. It is important to consider how to encourage the required human behaviour as well as what technologies may be useful for good communication.

**Keywords:** international agricultural research collaboration, effective communication, behavioural changes, modes of communication, ICT, learning processes, impact, wider partnerships.

### **Introduction**

The Australian Centre for International Agricultural Research (ACIAR) is an arm of the Australian Government's Official Development Assistance Program. Its charter is to commission research that leads to more productive and sustainable agriculture through collaborative projects involving Australia and developing-country partners. In helping developing countries to help themselves ACIAR aims to help them become self-sufficient in tackling their own problems. Australian scientists are encouraged to use their skills for the benefit of partner countries while at the same time contributing to solutions for Australia's own agricultural problems. The research is done in the developing countries, but there may also be an Australian component. See [www.aciar.gov.au](http://www.aciar.gov.au) for more information.

## **ACIAR mode of operation**

The ACIAR mode of operation is that of brokering collaborative partnerships between Australian and partner country researchers. Sometimes researchers from the Consortium of International Agricultural Research Centres (CGIAR) or other international research centres are also involved. This partnership approach is the cornerstone to undertaking locally relevant, effective and efficient research. This approach is also key to achieving capacity development in the partner country such that in future they can undertake their own research.

Involved in this process is the ACIAR Research Program Manager (RPM) who acts as the broker bringing together the partners for a project and facilitating their interactions. Subsequently they monitor the project and provide guidance as required. The RPM relationship with a project is very close, with intimate knowledge of the work and the participants.

ACIAR also has Regional and Country Offices located in nine countries around the world. Country offices provide support to ACIAR-managed collaborative research and development partnerships through representation, liaison, coordination, monitoring and evaluation and administrative activities. They serve as the link between partner countries and ACIAR headquarters. So continuous and clear communication between the Australian and partner country researchers and with the RPM and Country manager is essential for project success.

## **ACIAR experience in project operation**

There has been formal assessment of ACIAR project operation, such as can be found in *“Lessons learned from past ACIAR impact assessments, adoption studies and experience”*

[http://aciar.gov.au/files/node/13202/ias69\\_pdf\\_53586.pdf](http://aciar.gov.au/files/node/13202/ias69_pdf_53586.pdf)

This study of lessons learned focuses on the factors that lead to project success (or failure). Below is shown verbatim the ‘General impressions on project success’.

The survey responses gave rise to a number of general impressions, including the following:

- The ‘human’ side of projects is important; in particular, the choice of capable project leaders team members who get on with each other and have complementary language skills, to ensure cultural understanding and awareness.
- Having a close to 100 % commitment of time from Australian and partner-country key researchers is a big contributor to success.
- Success is often related to the amount of time the Australian project team spends in the partner country; the more time spent in the country, the greater the likelihood of success.
- Good management throughout the course of the project features highly as a success factor. Poor management can create serious problems early on, delaying projects by years, and often requiring additional funds to solve them.
- Physical and technological aspects of communication must be attended to, such as dealing with the lack of internet in some countries, and making sure the full team stays in constant communication.
- Demand-side drivers are important in determining the content and conduct of the project.
- Projects should align with partner-country government objectives to ensure in-country institutional and government support.
- A commercial partner in the project helps maintain focus.
- The needs and characteristics of the intended users of the research need to be understood and kept in mind during all steps in the project.

It seems that the first six out of the 10 points are to do largely with communication and bridging the cultural and distance gap.

As part of the study of ACIAR projects those involved were surveyed to assess their ideas as to what led to success. The following five factors were identified:

**1. Clearly defined objective and research questions:** By far the most frequently cited factor (in nearly a quarter of responses) was the importance of good project design, embracing clear objectives and research questions responding to a well-defined need. Elements of this included:

- Building the project around a clear research need and involving all parties (Australian and partner country) and stakeholders in the design. The need for a project plan with a well-defined path that assigns clear responsibilities to participants.
- Achievable research objectives based on a sound understanding of the problem to be tackled; project coverage relevant to the research priorities of partner-country agencies.

**2. Strong communication leading to good collaboration:** The importance of ongoing communication between all members of the project team is critical. Excellent communication enhances the potential for the most productive research collaboration. Elements of this include:

- The language skills of project participants, particularly where Australian participants had some skills in the partner country language.
- An established program of formal communication, including regular team visits (at least three times a year).
- Rigorous annual review and planning meetings.

**3. Trust, complementarity and alignment of interests:** These factors related to both the interpersonal relationships within the team and the sharing of research interests between team members. On the interpersonal aspect, mutual respect and trust was a frequently cited success factor. From the Australian perspective, this meant empathy with, and understanding of partner-country needs. From the partner-country perspective, this meant engagement in the project by partner-country scientists combined with respect for the capability of the Australian partners.

**4. Good project leadership and management support:** The importance of the leadership qualities of the project leader was a major component. Project leaders were expected to have the ability to empower the research team as well as the communication and interpersonal skills to keep a diverse group of researchers working together. Management support was closely related, but also referred to support from the broader management structures of the Australian and partner-country research organisations.

**5. Strong and capable research team:** to the success of projects. This factor refers to:

- The research teams technical abilities, particularly having the knowledge needed to undertake the research.
- The research teams commitment to the project.
- The research teams underlying motivations (i.e. (is it about the research itself, or about tapping into another source of funding?).

Of the above, how many factors link directly to team building and good communication? It would seem most of them in one way or another. In summary, the factors for project success fall into three broad areas:

**1. Human factors:** These include the ability of team members, researchers, counterparts and others involved in a project to communicate and work together harmoniously. They include:

- Personal capabilities of team leaders and managers.
- The ability of team members to engage in cross cultural communication.
- Various intangible aspects of the mutual regard within a team and between the project and other external organisations.

A number of the survey comments pointed out the difference between good and bad projects (i.e. in the running of the project and the ability to get results), often hinges on these 'human' factors. They loom large in any project but, because they are difficult to manage and quantify, their importance is often underplayed.

**2. Management factors:** These refer to the running and management of the project and include:

- Specification of tasks and goals to all members of the project team.
- Regular feedback on the progress of tasks and goals.
- Broad allocation of time in the country for key researchers.
- Allocation of the main researchers' time on the project.
- The day-to-day running of the project and its general organisation and administration.

Effective management is, of course, a crucial aspect of any research project. The nature of the research ACIAR funds, however, makes management particularly important.

**3. Communication factors:** Although in many ways a subset of project management, communication factors are, for two main reasons, worth thinking of as a separate category. First, they arise frequently in comments about the success of projects, and second, the nature of ACIAR projects means that effective communication will always be crucial for success. These factors cover the approach to communication within the project, including the techniques and technologies for communication within the team, the language capabilities of team members and, more broadly, the clear intent to undertake regular communication throughout the whole team.

The evidence above is clear and rings true with many of our experiences of what makes a project work; the human element. Well formed teams that are co-operative and communicate effectively are the key.

A specific detailed study of communications in an ACIAR project in Lao DPR found similar results to the above. The summary of this work is shown in appendix 1.

### **Current communication in ACIAR projects**

Communication in ACIAR and projects currently takes the form of:

- **Email:** This is the dominant mode of communication, and occurs on a daily and weekly basis between researchers, and fortnightly between RPMs/Country managers and the project members.
- **Telephone/Skype:** This occurs less frequently. Often projects would have a hook-up once a month between the Australian and partner country researchers.
- **Annual review meetings in the partner country:** These involve the Australian and partner country researchers. These may or may not involve the RPM and Country manager depending on time available.
- **Other project meetings in the partner country:** Australian researchers usually visit the partner country three or four times per year.
- **Project meetings or training in Australia:** It is quite rare for partner country scientists to visit Australia. This may happen once or twice during the life of a project.

- **Annual report:** from the project to ACIAR.
- **Mid-term review by ACIAR management:** This involves gathering most of the project team, visiting the research and talking with stakeholders in the partner country.
- **Final review:** As for the mid-term review

The communication tools and behaviours that currently exist in ACIAR projects are less than ideal to establish teams with desired behaviours of cross cultural communication, trust, sharing and co-operative attitudes with a common understanding of objectives.

Recognising this, ACIAR has facilitated projects to use online systems for collaboration such as “*Open Atrium*” <http://openatrium.com/#/> and “*BaseCamp*” <https://basecamp.com/tour>. However, this has been on a trial basis driven more by requests from project leaders rather than an agency policy that projects should use these tools. In some cases, projects have been set up to use these tools but then have not been used by the project team. The reasons for this and the benefits/difficulties that teams experience using these tools have not yet been fully explored by ACIAR. Lack of reliable internet access, ICT skills and the ability to train users remotely are some issues that we have encountered in testing online collaboration and communication tools.

Also, in the above what is largely described is the communication between the core research team in Australia and the partner country, and also between RPMs/Country managers and the project. What is not described is the project communication with farmers and NGOs who are also involved in the project. The involvement of farmers and NGOs in ACIAR projects is receiving greater attention as ACIAR tries to increase the impact from projects.

Increasing impact requires opening and maintaining communication beyond the academic research team. Farmers, extension agencies, NGOs, private sector and others need to be engaged. How to do this more effectively is currently a learning process in ACIAR.

### **What is required?**

ACIAR is undergoing a major review of its internal management, communication and collaboration systems. This has led to an initial vision for a collaborative project workspace that will be provided to project teams and also links with ACIAR management systems. This collaborative space is aimed at ‘breaking down the walls’ between ACIAR staff and projects and within projects. This space is likely to be based on *Sharepoint* for document management together with a link to *Skype* for monitoring team presence online and instant communication by voice, text and video messaging. Facilities for videos and photos to be uploaded and blogging will be provided. The space will be able to be accessed via mobile phones and tablet devices, as well as being on collaborators desktop computers. So it will be a collaborative space with similar functionality to *BaseCamp* and *OpenAtrium*. The user will need to be logged on to use the space.

The use of this space will be mandatory for project team communication with ACIAR, however the communication within the project team cannot be mandated. Thus the design of this space is skewed more toward project management.

This platform will not have the same appeal that social media tools such as *Facebook*, *WhatsApp* and *Twitter* have, but its purpose is different. Thus it remains to be seen as to whether the new ACIAR project space will be effective in facilitating communication and team building between Australian and partner country researchers and their stakeholders such as NGOs, extension agencies and private sector. Whether farmers will be comfortable using such a system is also unclear.

The tools used for communication are one aspect. However as outlined in section 3 the behaviours of the project leader and team are key to project success. Key facilitating behaviours are around empathy and communication. So even with good tools, good behaviours are required to achieve the factors for project success.

Under the current regime of most communication via emails and telephone calls, certain projects are very successful. This is usually due to one or two people being committed to the project, having enough time available for the project and being good communicators. These people act as facilitators for the many discussions and debates a project team has to have. They are good at drawing people out and enabling communication across disciplines. Often experience is a key factor. These people have experience in working in ACIAR projects with the barriers of distance and culture, and have developed their own techniques to overcome these.

It is important that we consider how to encourage the required human behaviour as well as the technologies that will be useful for good communication.

## **Conclusion**

ACIAR projects bring various disciplines and sectors together to deliver outcomes for the farmer. ACIAR funding is not large, what we offer is partnerships to collaborate on problems of mutual interest. ACIAR helps bring teams together, and helps them share and learn together to develop a common goal. The projects are intended to offer an opportunity where all partners can share in determining activities and workplans and also analyse results. The projects should provide a space where new innovative ideas can develop and grow.

ACIAR wishes its projects to be designed and executed to provide the greatest opportunity for improvement of the situation of poor farmers. Designing for and achieving impact needs good communication between the researchers and a broad set of stakeholders.

All of the above hinges on communication leading to mutual understanding.

ACIAR is a learning organisation and is currently reviewing and changing its approach to, and systems for, communication and collaboration. The current focus has been on what the enabling technologies should be. A more difficult question may be; how to achieve the human behaviour that leads to project success?

## **Appendix 1**

*The role of communication between scientists involved in agricultural development in South East Asia. Report 69.* W. Ward, J. Millar, A. Southwell., Charles Sturt University. Institute for Land Water and Society, Albury, NSW.

[http://www.csu.edu.au/data/assets/pdf\\_file/0003/884280/69-Communication-SEAsia\\_Agric.pdf](http://www.csu.edu.au/data/assets/pdf_file/0003/884280/69-Communication-SEAsia_Agric.pdf)

## Appendix 1

### **The role of communication between scientists involved in agricultural development in South East Asia**

This report presents research findings from a qualitative investigation into how agricultural scientists involved in international agricultural and rural development projects communicate with each other. Communication is an essential part of agricultural research in developed and developing countries, from initiating and managing projects to evaluating the impacts of research. It is also considered fundamental to a scientist's professional life and the stakeholders they serve.

While there has been considerable research on the role of communication in agricultural research in developed countries, there has been limited exploration of communication pathways between collaborating scientists from developing and donor countries. Using a case study of scientists in Australia and Lao PDR, this study examined informal and formal communication channels such as face-to-face meetings and in-country visits, field visits and journal articles, and the use of various information and communication technologies (ICTs).

The study also investigated factors that influence communication between program managers, project leaders, scientists and communication managers in Australia and Lao PDR.

Thirty participants from Australia and Lao PDR were interviewed in English by the lead author. Participants included 12 Australian agricultural scientists and program managers living in Australia, six international scientists residing in Lao PDR, and 12 scientists and communication managers from Lao PDR. Each interview took up to one hour and was transcribed in English, then coded and analysed using grounded theory to develop appropriate themes and categories. Two Lao interviews were conducted via email.

All respondents agreed face-to-face communication via in-country visits, meetings and field trips was the most important method of informal communication between Lao and international scientists working on agricultural development projects. This was important to build trust and respect between actors and engender personal relationships and professional collaboration within the project group, both in Australia and Laos.

Formal communication through peer reviewed journal articles was limited by lack of institutional support and English proficiency.

Email was the main ICT used for communication between scientists. Online discussion groups were used mainly by Lao and international scientists, and rarely by Australian scientists. Other synchronous ICTs that facilitate face-to-face communication such as Skype were reported to have limited or no use for work in Lao PDR due to insufficient bandwidth, online infrastructure or institutional support.

Differences in culture, (particularly differing views on 'keeping face' and hierarchy), personal communication styles (independent of culture), understanding public information, understanding Western science, economic and political systems, educational opportunities, organisational cultures and strictures imposed by international agencies were also mentioned as challenges for effective communication in international project teams.

From this analysis, seven recommendations were developed:

1. Agencies undertaking international research and development projects provide general and cross-cultural communication training and mentoring programs for international project scientists, as needed.
2. International or Lao scientists with a 'bridging role' should be used to encourage better communication within agricultural development projects, where feasible and appropriate.
3. A clear policy developed by agencies undertaking international research projects to encourage the production of formal publications such as refereed journal articles by South East Asian researchers in local and international journals.
4. South East Asian scientists continue to receive specialist training in various aspects of science communication in English, including the 'culture' of and processes involved in Western science.
5. South East Asian scientists should be encouraged to read more general and specialist scientific papers, particularly in technical English, through their libraries.
6. New ICT tools destined for use in South East Asia must be thoroughly tested under working conditions and locations in target countries before a project commences.
7. Project managers and researchers employed by agencies undertaking international research and development projects are encouraged to actively participate in online discussion groups and periodically peruse relevant information websites in South East Asia.