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NEWS

Knowledge adaptation key to local innovation, finds review

Rachel Mundy
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The adaptation of scientific findings to local needs is key to improving the economic impact of research funding in developing countries, according to an independent evaluation of the Swedish International Development Cooperation Agency's (SIDA) innovation programmes.

Local innovations in areas such as agriculture require translating available knowledge to home-grown needs
Flickr/Sida Sweden

The bulk of innovations in poor countries are not immediately based on new research findings, but on local or small-scale innovations through activities such as reverse engineering or translating available knowledge to home-grown needs, says the report released last month.

The message for research funding agencies is that new research findings do not automatically lead to innovation and economic growth. Instead, what is required is a better understanding of — and support for — the linkages between the supply of new ideas from research, and the demand for those ideas by local economies.

SPEED READ

- Innovations in poor countries are not based on new findings, but on translation of existing knowledge
- Support is needed to ensure that research leads to innovation, not just publications
- Science aid should target problem-driven research and include budget for evaluation

The findings are based on ten research cooperation programmes SIDA funds with up to 200 million Swedish krona (around US$31 million) per project.

"Inclusive development through innovation that improves quality of life in developing countries is of great importance," says Ana Gren, research advisor at SIDA, who is leading a working group that is writing a SIDA position paper in response to the review.

Gren says that other international aid agencies might note the benefits of supporting high-quality scientific research geared towards promoting economic growth, and suggests they should be open to backing it.

The report highlights the importance of supporting innovation initiatives that link government, universities and business to yield incremental innovations that increase economic productivity and build trust among people in developing countries.

Gren says these frameworks work well when research activities are initiated with local research partners, and when knowledge comes from local interests.

For example, a biotechnology project using a by-product of mushroom fermentation to treat waste water pollution

links academic research to a way of targeting a major agricultural problem in Africa, she says.

Amitav Rath, leader of the evaluation team for the review and CEO of consultancy Policy Research International, says: "Global research should be married to local communities for maximum local development impact".

For example, a leather research and industry cluster has emerged in Bolivia in which local businesses have adopted traditional methods for treating leather, Gren says.

The report also calls for investment in problem-solving research.

Rath tells *SciDev.Net* that such research — as opposed to results published in journals — is an important part of increasing the productivity of specific sectors in developing countries.

"It is not enough to be in an ivory-towered world, hoping that somehow one's enquiries will find application," Rath says. Instead, their application must be planned for from the beginning and sufficient resources provided, he says.

Another report recommendation is to spend more time and funding on evaluating ongoing projects.

Without evaluation, the different stakeholders cannot learn and adapt their responses as the work evolves, says Rath.

Because of this, he says, around three to five per cent of the overall budget of all research cooperation projects should be spent on evaluation.

He says that independent evaluation reports of aid projects not only prove to domestic taxpayers that their money is properly accounted for, but they can also highlight poorly designed or incorrectly framed initiatives.

Link to full report

COMMENTS (1)

Sinclair (Sweden)
1 March 2013

The findings of the Sida Review described above are most welcome - even overdue! How long have scientists been well aware of the logic that stakeholders need to be on board when it comes to project design, management and delivery? That stakeholders should remain engaged throughout the research phase is also crucial so that scientists and stakeholders together make collective DECISIONS as to the nature of investigations, adoption of relevant techniques and thereby increase the possibilities that some degree of innovation will ensue. The need for continuous monitoring and evaluation DURING the project management cycle (not just mid-way or after completion) is NOT EASY and has been largely impractible because of financial and logistical constraints. Continual monitoring and reviewable decision analyses are therefore crucial for effective project cycle management. Existing post-ante approaches based on logframes are ineffective at facilitating the key decisions needed to adapt research activities to changes that inevitably occur during the project delivery cycle (eg especially under inherently complex natural and/or social conditions). At the same time PCM is not made any easier by the requirement of researchers to remain responsive to the opinions, suggestions and perceptions of stakeholders. The largely untapped potential of appropriately designed cloud-based virtual (real-time) monitoring systems with which to manage the complexities of development-related research and the interactions of stakeholders during the whole process of engagement is an extremely exciting prospect for us all. Why otherwise, apart from commercial gain and social networking, was the broadband cable backbone along the coasts of Africa and other major continents laid down in the first place?