Technology transfer must be relevant to the poor
Technology transfer's promise for eradicating poverty will only be fulfilled when technologies are chosen according to the priorities of the poor, argues *Maria Arce Moreira*

Technology transfer is the process by which technical knowledge moves within or between institutions and is applied to address key challenges faced by developing countries. Many developing countries hungrily acquire technologies from industrialised countries in a bid to spur their economic development and rid their population of extreme poverty.

But technology transfer will only help eradicate poverty when the realities of the poor inform decision-making and investment.

The millions of poor people who are under-nourished and have little access to water or basic energy or sanitation services — despite years of investment by developing countries in technology transfer — are testament to the importance of aligning the priorities of the poor with decision-making over which technologies to import and promote.

Poor people's basic technological needs are generally overlooked in this process. Local communities' knowledge and skills go unrecognised, and they are given little or no role in choosing, controlling and assessing the impacts of imported technologies.

Democratic decision-making

Decision-makers should be identifying the most vulnerable groups of society, and determining how their existing knowledge could be strategically used to overcome poverty-related challenges.

They should also be assessing how such individuals will be affected by the introduction of technologies, and how they can use these citizens' creative abilities to contribute to technology transfer decision-making and monitoring processes.

But most decision-makers do not harmonise technology choices with their commitments to poverty eradication — technology is not an area where the poor's involvement is desired or expected. They are seen as passive recipients rather than as active and competent stakeholders able to analyse and choose the technology they want and need.

Rather, technology transfer remains the professionals and technicians' prerogative — consideration of its sustainability and impact takes second stage.

And despite evidence from decades of development work worldwide that top-down approaches do not lead to sustainable solutions and can create dependency on external resources, most technology transfer targeted at the poor is still centrally managed through government or academic extension services.

In this way, decision makers can favour the interests of more powerful stakeholders involved in distributing and promoting technologies over strengthening poor people's livelihoods ensuring ecosystem resilience and agricultural biodiversity. Instead of contributing to the public good, technology then becomes a commodity for those who can afford it.

Building synergies

The perception of technology transfer as being an exchange of hardware or knowledge only between specialists must be altered to also include a recognition and strengthening of the poor's knowledge and skills to produce relevant products and services. This will be a challenging, but not impossible, task.

Such a change begins with a capacity to support locally owned and managed simple and effective technologies. Community-based disease control initiatives like the Foundation Pro-Habitat's housing improvement programme in Bolivia or Practical Action Eastern Africa's community programmes in Kenya have decreased the incidence of Chagas disease and the population of tsetse flies respectively. Such initiatives show that communities can use their own knowledge and organisation, monitoring and management skills to benefit from simple technologies.

Elsewhere, for example in South Africa and Zimbabwe, local communities have combined traditional support and knowledge exchange systems with simple technological solutions such as rainwater harvesting, seed conservation and drip irrigation to address their problems.

These experiences also highlight the need for a comprehensive understanding of a community's social and cultural dynamics, including gender inequalities, to identify the biggest vulnerabilities, capacities and power hierarchies that may deter or support the choice of technology.

Decision-makers' lack of understanding about poverty dynamics often results in little support for research agendas and technologies that respond to vulnerable communities' most pressing needs and in the development and transfer of potentially harmful and unproven technologies.

But by building alliances between communities, development practitioners and researchers, they could bring diverse levels of expertise and knowledge together to create platforms for dialogue and decision-making that ensure viability, ownership and sustainability.

The expertise developed in participatory processes can provide a solid base for developing pro-poor technology transfer and should be seriously considered in technology transfer agendas or discussions.

http://www.scidev.net/content/opinions/eng/technology-transfer-must-be-relevant-to-the-poor.cfm