# CAPACITY BUILDING AND TECHNOLOGY TRANSFER

Any effort to build capacity or transfer technology should consider how such efforts best fit the current circumstances and needs of the partner institutions. **Capacity building** can be seen as incorporating a wide range of activities aimed at addressing gaps in the ability of institutions to produce, manage, use, implement and scale up their research endeavours. It occurs in research partnerships in formal and informal ways. Some research partnerships are explicitly about capacity building, others exchange knowledge and skills as part of meeting the objectives of the research project.

**Technology transfer** is a term used to describe the processes by which technological knowledge, in its various forms, moves within or between organisations. Technology transfer is traditionally understood as a commercial or trade-related process in the innovation chain involving the acquisition and use of technology and the knowledge and skills needed to operate it. In the context of research partnerships, it can also be understood as the process of technological learning and benefit from technical exchanges in the partnership.

As you think through each of these questions, consider whether and how they can be incorporated explicitly into the research contract.

## How do the project requirements match institutional capabilities?

- Does the partnership assume an existing enabling environment in all partner institutions?
- What capabilities (human resources, skills & knowledge, infrastructure & equipment, managerial & financial capacities) are required to carry out the work of the partnership?
- How will the partnership facilitate capacity exchange between partners of skills, knowledge and experience?
- ❖ Have partners made an explicit commitment to strengthen capacity?

What are the areas of opportunity that could be addressed as part of this partnership?

- What are the capacity building needs of your institution? Do you have a capacity building plan?
- Does this partnership explicitly concern or address capacity building? If not, how can capacity strengthening activities by built into the partnership (contract)?
- ❖ Where are opportunities for capacity strengthening possible? (e.g. skills transfer, knowledge exchange, training, infrastructure or equipment)

#### What will the extent of formal technology transfer be?

- ❖ Will technology transfer be informal (exchange of technical know-how, skills and experience) or formal (horizontal: transferring technology between institutions to enable partner institutions to use the technology for their own application and production; or vertical: moving research results from 'bench to market")?
- ❖ Based on the form of technology transfer identified above, what will this require in terms of capacity and procedure? How well is your institution equipped for such activities?
- ❖ What could you reasonably expect from your partner/s should all these elements not be present at your institution?

### What additional resources are anticipated and how might these be included?

- ❖ What resources and capacities might be required to manage project outcomes after the partnership has ended? How can these be built into the partnership agreement upfront?
- How can capacity building efforts be harmonised across different partnerships?
- ❖ In the case of more formal technology transfer, what capacities will your institution need in order to be able to negotiate and manage intellectual property rights, licences, benefit sharing and commercialisation?
- ❖ Does the partnership facilitate local ownership of research activities and outputs and control over how resources are allocated?
- ❖ Are there opportunities for pooling skills and resources across institutions and networks to attract funding and benefits from combined capacities

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