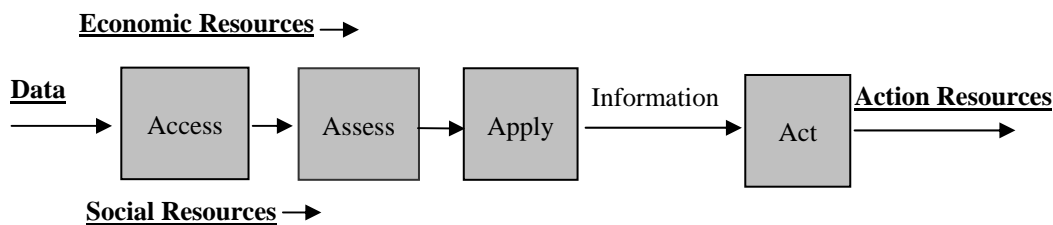


## **Foundations of ICTs in Development:** *The Information Chain*

All that ICTs do is handle information. One part of understanding "e-development" – the contribution of ICTs to socio-economic development – then, must be founded on an understanding of information in development.

Ideas about local content and information literacy have made a start on this understanding. They do not, though, go far enough. To understand the full range of activities and resources necessary for information to contribute to development, we must understand the *information chain*:



We start with data: unprocessed facts and figures that might or might not be useful. Individuals must be able to access that data, assess its relevance, and apply it to a specific decision. Only then can it be counted as information. And it can still only contribute to development if it is then acted upon.

To repeat, unless the whole information chain operates successfully, there can be no contribution of information – including ICT-based information – to development.

To ensure the information chain does operate, development actors need four sets of resources to be in place:

- **Data Resources**: they need relevant data to be available in the first place.
- **Economic Resources**: they need the money, the skills, and the technology in order to access the data.
- **Social Resources**: they need the motivation, confidence and knowledge to access, assess and apply the data, and they must trust the source.
- **Action Resources**: they must be able to act on the decisions made with the information. This will require hard resources such as money, technology and raw materials plus soft resources like skills and empowerment.

Too often, though, such resources are lacking. Take the example of a typical poor community:

- **Data is not available**: related to what community members need – about prices, best practices, finance and support schemes, customers for goods and produce, etc

- ***Data is available but community members cannot access it:*** e.g. they do not know where to find details about government support schemes, or they cannot afford to get that data.
- ***Data is accessed but community members cannot assess and apply it:*** e.g. they do not understand the contents or relevance of a guide or directory that they access.
- ***Information is created but community members cannot act on it:*** e.g. they identify new markets but cannot afford the materials or transportation costs necessary to supply those markets.

We can use the information chain to evaluate the effectiveness of e-development projects. We then see that most are too narrowly conceived. And we understand why so many such projects fail to have a significant impact:

- At worst, they address only the technology component of economic resources. This only affects one part of the access function. ICTs per se do nothing to affect any of the other missing resources or deficient information chain functions.
- Better projects also try to develop local data content and local ICT skills. But this, too, is nowhere near enough. It still addresses only the access function, and does nothing to ensure the full information chain can be completed. Hence the limited value and limited uptake of some recent local data content development projects.

To be effective, then, e-development projects must be designed around the information chain. They must either provide or draw together an entire "information chain package" of all resources necessary to turn data into effective action. Until this happens, ICTs will not deliver on their developmental potential.

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