ICT/ICM Human Resource Capacities in Agricultural Research for Development in Eastern and Central Africa

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Abstract

In Sub-Saharan Africa, agriculture accounts for 70% of employment and is vital for the livelihood of the rural poor. Modern information and communication technologies (ICT) and appropriate information and communication management (ICM) are necessary to support agricultural research for development. Information technologies are evolving quickly, however human capacities are lagging behind. Therefore, the Regional Agricultural Information Network (RAIN), one of the networks of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), commissioned a team of consultants to undertake an assessment of ICT/ICM human resource capacities and related training needs in the context of agricultural research for development, funded through a grant provided by the Technical Centre for Agricultural and Rural Cooperation (CTA).

Between July 2004 and February 2005, we examined institutional ICT/ICM policies, human resources, and training needs at national agricultural research systems and related institutions within the ASARECA sub-region through visits and interviews, questionnaire surveys, and desk studies.

The study revealed a general lack of institutional ICT/ICM policies which, in turn, affect human resource management strategies, commitment to ICT/ICM by managers, initiation and execution of ICT/ICM functions, establishment and management of ICT/ICM units, and status of ICT/ICM staffing. We found deficiencies in skills for accessing scientific and technical information; managing content, data, and information; disseminating and communicating information; and managing technologies. These deficiencies lead to a wide diversity of training needs throughout all ICT/ICM staff categories and occupations. Training is needed at various competency levels, especially at short-term, but also at diploma, graduate, and postgraduate levels. Fortunately, during our country visits, we noticed that most training needs can be satisfied with resources available in-house, in the country, or in the ASARECA sub-region. Our conclusions and recommendations stress the need for RAIN to continuously follow up and participate proactively on the global evolution of ICT/ICM. For solving infrastructural and skills deficiencies, the starting point is awareness building at institutional, national, and regional levels. For certain recommendations, we suggest specific action plans.

We give profiles of resource institutions for training within and outside the ASARECA sub-region.

Keywords: Agricultural Research for Development, Eastern and Central Africa, Human Resource Development, ICM, ICT

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