



Literature review on innovative approaches that aim to increase retention and performance of community development workers and agricultural service providers

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Working paper

inSCALE – Innovations at Scale for Community Access and Lasting Effects

The inSCALE programme, a collaboration between Malaria Consortium, London School of Hygiene and Tropical Medicine (LSHTM) and University College of London (UCL), aims to increase coverage of integrated community case management (ICCM) of children with diarrhoea, pneumonia and malaria in Uganda and Mozambique. inSCALE is funded by Bill & Melinda Gates Foundation and sets out to better understand community based agent (CBA) motivation and attrition, and to find feasible and acceptable solutions to CBA retention and performance which are vital for successful implementation of ICCM at scale.

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Preface

This document was prepared for an internal meeting of the inSCALE project. It does not aim to be a comprehensive systematic review of the topic. Rather, it pictures the landscape based on review articles and informal discussions with expert colleagues. This document is not an official inSCALE publication but rather an internal working document.

None of this document may therefore be quoted, copied or referenced.

Discussions about the content of this document are welcomed.

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1 Background and aims

Recently, Malaria Consortium was awarded a grant from Bill and Melinda Gates Foundation to better understand work motivation, attrition and use of data to find feasible and acceptable solutions to CBA retention and performance issues which are so critical for successful implementation of integrated community case management (ICCM) at scale.

A key element of the project is to implement and measure new ideas or ‘innovations’ that may lead to increased levels of performance of CBAs. Taking lessons from other sectors is a key pillar of the InSCALE approach and it is anticipated that a review of the community development literature may result in a rich bank of ideas.

The aim of this study is to review the community development and agriculture literature to identify concepts, approaches or underlying concepts which may contribute or have contributed to the motivation, performance and quality of community development workers (see also annex 1: Scope of Work).

This report contains the methodology used for the literature review, an overview of the findings in both agriculture and community development sectors and a discussion on six specific approaches that have been documented separately (annex 2). In the final chapter concluding remarks and areas for further research are presented.

2 Methodology

2.1 Literature search

A literature search was carried out mainly through the internet, using online databases (Scopus), websites of international organizations (FAO, IFPRI, IFAD, SD, World Bank, CGIAR) and search engines. International knowledge networks were also consulted, such as: GFRAS, neuchatelinitiative.net, farmerfieldschool.info, infobridge.org/ffsnet, communityipm.org, farmafrica.org.uk, cahnetafrika.net, planotes.org., cbnrm.net.

A combination of any of the following key words was used.

- For agriculture: farmer facilitation, community extension worker, capacity development, community agricultural services, extension services, innovation, HRD and agricultural services, performance evaluation, staff development and agricultural services/or extension services, HRD and extension workers, extension workers and motivation, retention, training, supervision, performance appraisal, recruitment, rewards, job analysis, accountability.
- For Community Development: participatory development, community based development, community development workers, community based agents, community trainers, community facilitators, rural development workers, participatory planning, participatory management, staff performance community, accountability, retention, training, supervision, performance appraisal, recruitment, rewards, job analysis.

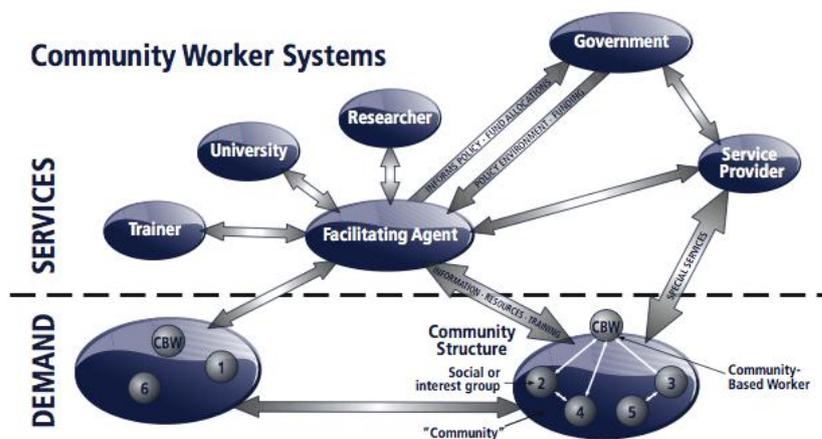
Because of time constraints, the focus was on English language literature and on Sub-Saharan Africa. Only full-text articles were included.

Key selection criteria:

- Innovation: a programme, an activity, approach or underlying concept which may contribute to the performance and retention of Community Based Workers in agriculture and community development.
- The literature should contain as much evidence as possible on different factors that impact performance and on the feasibility, scalability and acceptability of proposed interventions.
- For the search, it was important to broadly define “Community Based Workers” to guide the process. The elements of the broad definition of DFID (2007) has guided our search. Their multi country action-research project defines a community based workers system as follows:
 - People from within a community providing voluntary time to support their community
 - These CBWs are a focus for providing training and support to others;

- Provision of incentives to these CBWs. In most cases costs are covered such as travel and food, in some cases they receive a fee or a stipend for the service rendered, and there are a variety of non-monetary incentives.
- Recognition that CBWs are para-professionals, selected from the community they live in, trained to cover a specific task, but without a long professional training and qualification;
- Provision of support and supervision by a facilitating agent (FA) that can be an NGO, private sector or government;
- Mechanisms of accountability by CBWs to the community or a specific group within the community as well as the facilitating agent;
- Operating in a multi-stakeholder environment such as illustrated in figure 1.

Figure 1 Diagram of the Community-based Worker system



Source: Mbullu, 2007

The study focused on HIV/AIDS and natural resource management sectors but the CBW system guidelines that were developed as a result, may be useful for other sectors as well as suggestions and innovative examples from Kenya, Uganda, Lesotho and South Africa are given on the operationalisation of a CBW system (Mbullu, 2007).

It is important to note that civil servants (agents employed by central government or ministries) were not considered a category of community-based workers (CBWs), because they do not fulfil most of the conditions of the definition outlined above.

2.2 General comments on the availability of literature and data

- In agriculture, the workforce consists of three types of actors: service providers, intermediaries (such as CBWs) and farmers themselves. Most literature found covers only one actor group; we did not locate any research that looks at performance and motivation of these three actors from a systems perspective.
- In terms of international policies, for example, it is somewhat striking to find that “Human Resource Development” is not mentioned on the FAO website as a specific topic, nor

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mentioned in key strategic documents such as the World Development Report 2008 (that limits HR development to education and skills development) or NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP).

- A number of relevant studies exist on human resource development in **public extension services**¹ but, as noted before, we did not consider government employees as CBWs. However, with a small additional effort, we can provide a literature review of approaches to improve performance of public extension agents based on the literature found so far.
- Unlike the body of knowledge that exists around HRH and CHW, there are few studies that focus specifically on the motivation, performance and retention beyond capacity building and training of agriculture-focused **CBWs**. Many studies on agricultural innovation mention factors that impact on motivation, but without (grounded, scientific) evidence. This seems a major gap in research. The same applies for community development approaches; issues of motivation and performance are recognized as being important in many documents but little systematic HR research has been done to understand those dynamics in the service delivery chain in Sub-Saharan Africa.
- A small number of studies also exist on the motivation of farmers to participate in extension programmes (e.g. Wanyama, 2010).
- Sector specific information (health, agriculture, sanitation) on community level service delivery is readily available while information on multi-sector or integrated development approaches is less well organized. For example, we had wanted to include evaluations of integrated services (such as “agents polyvalents ruraux” in West Africa) but literature was not available.
- For both agriculture and community development, there are several models that are successfully applied, successfully meaning among others a high adoption rate of new/improved practices by farmers or communities. However, most approaches have not been systematically evaluated in terms of effectiveness on CBW performance, quality and retention. Evaluations of approaches tend to focus on project outcomes and processes. Many evaluations focus on technological and scientific innovation (incl. research and education systems) to boost agriculture and/or on financing the services in the sector and less on the human and social innovation processes required to make the system work. This is confirmed in a broader HRD research paper of Ekboir (2009) who states that, while many authors have analyzed innovation processes that involve small farmers, and even more agencies have implemented programs to help farmers innovate, few authors have systematically researched how to build the institutional capabilities that agencies need to strengthen their impact on poverty.
- We tried to select literature from Sub Saharan Africa but many approaches find their origin in Asia or Latin America and are more frequently evaluated than approaches in SSA. Therefore, we included information from South-East Asia (in particular T&V, FFS) and Latin America (LARC).

¹ E.g. Theisoehn, T. and T. Land, 2006; Swanson and Rajalahti, 2010, ch. 6 and 8;

3 Findings

3.1 Agricultural extension services

3.1.1 Macro concepts in agricultural extension

Definitions

Extension, in a broad sense, is a function that can be applied to various sectors. It operates in the health (e.g. outreach services, CHW), education (e.g. continued learning, adult education) and rural development sector as well as in agriculture.

In a strict interpretation, the only purpose of agricultural extension is to disseminate information to raise the production and profitability of the farmers (agricultural production performance). In a broader interpretation, the purpose of agricultural extension is to advance not alone production knowledge but the whole range of agricultural development tasks, such as credit, supplies, marketing and markets (agricultural process development).

In the broadest interpretation, agricultural extension provides nonformal – agriculturally related continuing adult education - for multiple audiences: farmers, spouses, youth, community, urban horticulturalists (continuing agricultural education and community development) and for various purposes (including agricultural development, community resource development, group promotion and cooperative organizational development) (Rivera, 2001).

Approaches

In most countries, nearly all agricultural extension systems were organized as departments within the ministry of agriculture. Therefore, most of these extension organizations are government agencies with a hierarchical management structure. In addition, a primary national agricultural development goal in most countries following independence was to achieve national food security. As a result, most extension programs focused primarily on technology transfer activities that would improve the production of basic food crops, with far less attention and fewer resources being given to other extension programs and activities, including livestock, horticulture, fisheries, and natural resource management (Swanson and Rajalahti, 2010).

Over time, national governments and donors became increasingly concerned about the performance of national extension systems, and different models have been tried and tested (Swanson and Rajalahti, 2010). Below a list of paradigms that developed over the years in Sub-Saharan Africa. Most existing models are combinations of these broad categories.

Technology Transfer Extension Models

- Ministry-Based Agricultural Extension or Advisory Services
- Training and Visit Extension

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- Participatory Extension Approaches
- Animation Rural
- Integrated Rural Development
- Agriculture and Rural Development
- Farmer-Based Extension Organizations
- Participatory agricultural research
- Market-Oriented Extension Approaches
- Commodity-Based Advisory Systems
- Innovative, Market-Driven Extension Approaches
- Nonformal Education/Extension Approaches
- Farmer Field Schools
- University-Based Extension

(Based on Swanson and Rajalahti, 2010, Davis, 2008).

Who are the frontline service providers?

Traditionally, extension workers are employees of the Ministry of Agriculture. The core extension personnel of developing countries consist of **village extension workers, subject-matter specialists, and supervisory staff or extension officers**. Because most public extension systems are still top-down in structure, inadequately funded (especially for field-level programmes) and have done little or nothing to keep and upgrade their extension staff, there are some who think extension services should be privatized or turned over to CSOs (Swanson, 2008). Others believe non-governmental organizations (NGOs) have a comparative advantage in carrying out specific extension activities, since their staff members are more highly motivated (Swanson, 2010). Also, as the agricultural sector becomes more commercialized, there is a worldwide trend towards shifting more of the cost and implementation of extension and advisory services to the farmers themselves.

Hence, the diversity of service providers increases, as in other sectors, over time. In terms of human resources, the most important change in extension is the shift from a more linear technology transfer model toward a more holistic approach in understanding how and where farmers get their information and technologies. Extension, in effect, serves as a facilitator or knowledge broker between research, extension and farmers, often through the intermediation of innovative farmers (Swanson and Rajalahti, 2010). For example, it is the role of extension to identify these **innovative or entrepreneurial farmers** and then decide whether it would be possible to upscale any of these potential enterprises to the community, subdistrict and/or district level through leadership of these innovative farmers. This transition has implications for the technical, professional, and entrepreneurial skills that extension agents will need to be effective in this new role. One of the major problems is the unavailability or inadequacy of financial resources of most public extension systems to maintain a functional extension system, let alone to transform these institutions into providing essential extension services for the rural poor (Swanson and Rajalahti, 2010).

3.1.2 *Micro applications*

This literature review focuses on community based approaches, e.g. approaches that have proven most successful in improving quality and responsiveness of services in collaboration with farmers themselves.

The powerful trend towards empowering farmers through active participation in decision-making has led to various emphases in extension, such as working through farmers' groups, preparation and delivery of client-oriented messages, observance of gender sensitivity, and research-extension-farmers linkages (Qamar, 2005). Extension becomes "facilitating learning" instead of "teaching". Under *extension as a learning* paradigm, extension workers must learn from the farmers being served, as well as listen and link to research and markets, in setting extension priorities. Therefore, under the extension as a learning paradigm, farmers and extension agents should work together in setting priorities so that their annual work programs directly address farmer needs (Swanson and Rajalahti, 2010).

One of the key elements of new learning approaches is to work directly with community leaders such as farmers facilitators, farmer researchers or community animal health workers. Compared to other agricultural services (supply, business development services), extension services (like outreach services in health) are the services that can most effectively be devolved to other actors in the context of the subsidiarity principle.

We present 4 particular approaches of working with community members in service delivery:

Farmer Field Schools

FFS are a participatory method of learning, technology development, and dissemination based on adult-learning principles such as experiential learning. In Africa, FFS are being used for a variety of activities, including food security, animal husbandry, and soil and water conservation. They are even moving beyond agriculture into health (HIV/AIDS) and other relevant rural topics (Davis, 2008). Internal community based facilitators from the community play an important role in training, learning and social change.

Community based animal health workers (CBAHW)

A form of privatization of veterinary services whereby CBAHW work in remote and marginalized areas providing primary care and report to extension organizations on diseases and outbreaks.

Local Agricultural Research Committee (LARC)

LARC is an approach to interactive learning for promoting integrated decision-making and innovation for sustainable agriculture by small-scale farmers. It is a form of farmer participatory research (FPR) that aim to combine farmers' indigenous traditional knowledge (ITK) with the more widely recognized expertise of the agricultural research community. It aims to actively involve farmers in setting the research agenda, implementing trials and analyzing findings and results. Instead of working with individual farmer researchers, this approach works with research teams.

Training and Visit (T&V)

The primary objectives of these projects were to strengthen the extension management system, improve the extension agent–farmer ratio by increasing the number of field staff, and provide basic support services to field extension staff members (offices, housing, transportation, extension materials, and so forth) (Swanson and Rajalahti, 2010).

The former approach is not a community based approach but some of its elements still apply to situations where different extension forms co-exist and they may still be effective depending on the context.

Discussion:

- Except for the latter approach, the approaches described are largely community and demand driven which is an appropriate approach in countries with large rural and agricultural population who depend on the services for their livelihoods. Communities themselves have strong incentives to participate in learning programmes and access advisory services. In other words, agricultural services (in particular extension) are not that much a public good as health services are.
- The innovation in terms of performance of extension services in Farmer Field Schools and LARC refer to a) the transfer of responsibilities to communities and individual farmers to provide advice and services b) downward accountability c) upscaling of training and d) a learning culture within the extension organization.
- The innovative aspect of CHAW is motivation based on “fee-for-service” (privatization).
- In particular the FFS approach seems applicable to other sectors that aim to provide educational support to communities.
- All the approaches confirm that fieldworkers must undergo a fundamental change of perspective accompanied by learning new skills and approaches to “broker” knowledge. The interface between outside facilitators and local community facilitators is crucial. However, the transformation of roles of extension agents has not been analyzed in depth nor has the interface between local institutions and extension agents. This is a major gap in research.

3.2 Community development services

3.2.1 Macro concepts in community development

Community development finds its’ origins in the integrated rural development paradigm which is seen as an alternative to the practice of central authorities in designing interventions which deal with sectors of social and economic life in isolation from each other and/or which assume that socio-economic problems can be solved by standard measures, regardless of location or culture. In sum, IRD, community or participatory development is based on the following three principles:

- It sets development activity within a territorial rather than sectoral framework, with the scale of the territory being smaller than the nation-state.

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- Economic and other development activities are reoriented to maximize the retention of benefits within the local territory by valorizing and exploiting local resources - physical and human.
- Development is contextualised by focusing on the needs, capacities and perspectives of local people, meaning that a local area should acquire the capacity to assume some responsibility for bringing about its own socio-economic development (Nemes, 2005).

Since the 1960-70's rural development programs have evolved from area development programmes, non-governmental approaches, participatory appraisal and planning, community-based natural resource management, to community participation and empowerment programmes. Most programmes are NGO or donor driven. Community-based facilitators are recruited to facilitate management by local committees.

For example, in community driven development programmes or CBNRM, community structures (community development committees, village or ward community development committees) have been given responsibilities for (part of) management tasks. In practice, sometimes those structures have a limited role because officially power has not been delegated to them by government. They are often superseded by district government or sector departments (Campbell and Shakleton, 2001). In NGO or donor driven community development programmes (such as World Bank CDD programmes), district or ward facilitators are recruited to support communities in management rural development projects. In a number of countries (Sierra Leone, Cameroun, Tanzania), they are expected to continue working at local government level, but the effectiveness of these staff transfers has not yet been evaluated.

Literature on successful community approaches is abundant but a major challenge for long term effectiveness is the sustainability of processes in the absence of community facilitators. Also the challenge of volunteerism, legitimacy of community based management structures and facilitators, local power relations, accountability and inclusion and exclusion are being addressed in several studies (e.g. Ribot, 2004).

3.2.2 *Micro applications*

In this review, we focused on two innovative approaches to set-up a system of community-based workers. One is the strengthening of community structures and the use of community trainers in sanitation programmes and the second example is on multi-sectoral community workers. While many developing countries are struggling to identify such multi-disciplinary workers in the context of HR shortage or to revitalize integrated development systems (such as “agents polyvalentes rural” in West-Africa), this case from South Africa may be informative.

Discussion:

- Innovation in the CLTS approach refers to a) community skills development to address sensitive issues in sanitation at household level and b) an award system for communities who achieve a defecation-free-status. In India, public financing is based on achieving this status.

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- Innovation in the CDW approach refers to the a) well structured and embedded learnership programme and b) the certification system for graduates.
- One discussion that always comes back in CBW approaches is the issue of generalist or specialist CBWs and their interaction. Specialists are expected to be more focused, while generalists are a more cost-effective approach, although research also points out that an increase in tasks and diversification of existing tasks can impact negatively on the quality of service (Mbullu, 2007).
- Not included in the review, but of significance in the context of integrated rural development and sustainable human resource development in rural areas are alternatives to adult education across sectors such as non formal education and competency-based skills development. Those approaches aim at dealing with the lack of skilled human resources on the one hand, and shortage of employment opportunities on the other (e.g. ADEA net). In many sectors, including agriculture and community development in general, new approaches are being tried to develop local leadership. Examples are the SNV leadership for change programme and the KIT Agricultural Innovation Coach programme (Assane et al. 2007; Khalil et al. 2008).

4 Other trends and issues that impact on CBW performance

A number of global developments need to be mentioned that impact on CBW performance. They relate to institutional reforms in different sectors that change roles and responsibilities of service delivery.

4.1 Decentralization

Decentralization is an increasingly common aspect of extension reforms in the context of increasing pressure to become more effective, more responsive to clients, and less costly to government. Depending on the country context and reform objectives, decentralized services can be managed by local governments, community/producer organizations, or local governments in conjunction with producer/community organizations. In Ghana, for example, extension officers at district level are now managed under local government service of the district assembly.

Decentralizing extension by involving farmers and local government in governance of programs can improve program accountability, increase user ownership of programs, ensure relevance to local needs, improve planning and information flows, and strengthens user capabilities. Decentralizing governance holds particular promise for making extension workers accountable to users. However, there is not yet sufficient evidence on the effectiveness of new accountability mechanisms on workers' performance introduced through decentralization reforms (World Bank, 2000).

4.2 Governance and accountability

Increasingly, approaches are being developed that look at service delivery from a governance perspective. The World Development Report 2004 "Making services work for the poor" emphasizes that despite the huge investments in public services over the past few years, performance is still lacking, in particular for the poor. The report, and several programmes that aim at improving health, education, water and sanitation services, suggest to look further into demand side mechanisms and accountability relations that can greatly enhance service provider motivation. A number of innovations are being implemented and documentation is starting to provide some evidence, in particular on strategies to improve accountability in social services². In agricultural extension, recent studies have been done in Ethiopia and by IFPRI³ (Tewoday et al, 2009).

4.3 Gender and rural service delivery

Gender equity in service delivery has not been taken into account in this literature review although it is recognized as highly important. Although not specifically focused on retention and performance of community workers, two recent publications are mentioned here. IFPRI recently published a World Bank-IFPRI book (2010), "Gender and Governance in Rural Services", which presents research results and recommendations on ways to improve agricultural and rural service delivery, and to provide more equitable access to these services for women and men. UNDP, in

² E.g. A study conducted in seven African countries (Ghana, Morocco, Madagascar, Morocco, Niger, Senegal, Sierra Leone, Uganda), by Transparency International on governance in the education sector argues that accountability and transparency in human resource management (e.g. allocation of specific allowances, distribution of equipment, recruitment, transfer, training and promotion, behaviour and conduct, etc.) greatly impact on the performance of teachers and the quality of education (Transparency International, 2010).

³ See: <http://www.ifpri.org/book-22/ourwork/researcharea/governance>

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collaboration with UNIFEM published a User's Guide to Measuring Gender-Sensitive Basic Service Delivery that provides practical tools to integrate gender in service delivery programmes (UNDP, 2009).

5 Conclusions and areas for further research

From the literature review, it is apparent that little *explicit* research is being undertaken on factors that determine motivation, quality of service, and performance of community-based extension workers in agriculture in Sub Saharan Africa. Despite the calls for it in several publications, there do not seem to be concrete research proposals and initiatives to respond to the need and hence, the evidence base is weak.

Despite the limited evidence available on CBWs performance, the approaches described have achieved remarkable results in terms of project results and impact on livelihoods. In most cases, community-based approaches are positively correlated with behaviour change and less with service delivery. A common requirement is that for those approaches to be successful and sustainable continued capacity development is required at central and local level. However, capacity development should be embedded broader national human resource development strategies and the following issues and questions need to be considered:

- **Develop systematic research on performance, motivation and retention of agriculture and CD focused community-based workers**

This literature review provides an overview of current thinking on community-based agricultural and community development services that *implicitly* address human resource development issues. In fact, community based approaches in agriculture and community development are based on the assumption that locally recruited facilitators (in the form of farmer facilitators, community advisors etc.) are both more knowledgeable in terms of content and more motivated because they serve, and are accountable to, their own community.

Although the approaches analyzed do confirm some of those assumptions and provide evidence of improved programme outcomes, still more research needs to be done that systematically monitors and evaluates levels and determinants of CBWs performance, retention, motivation in agriculture/community development over time in developing countries. Many initiatives are donor or NGO-driven and sustainability is at stake.

Examples of questions that remain to be addressed are:

- Recruitment/election, representation and legitimacy:
- Who are farmer facilitators and what are the factors that determine their election by the community? Who do they represent and what are mechanisms of inclusion and exclusion of groups in society? How does this affect legitimacy and acceptability of their role and their performance?
- Motivation:
- What are factors of intrinsic and extrinsic motivation of community based advisors and facilitators (such as farmer facilitators, contact farmers, community councillors) to become advisor, remain in the job and provide quality services to their community? In the case of scaling-up to other communities (e.g. in the case of FFS), what motivates them to advice beyond their own community?
- Supervision:

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- What if farmer facilitators do not perform? Who defines quality? How are they being held accountable?

Some of those questions may be addressed through interviews with authors and programme staff involved, others may need additional research.

In addition, the approaches that were reviewed pointed at some critical issues that need to be taken into account in any initiative that aims to improve rural service provision.

- **Learning across sectors on transformation of human resource development in the context of move towards more participatory, consumer-led, pluralistic and market-oriented forms of service delivery.** In agriculture, but also in the health sector, the changing environment and the diversification of actors involved in service provision, requires a major transformation in the field of human resource management and development. One example is the change from teaching approaches to learning and facilitation approaches and the impact of this shift on public service providers' performance. This applies to many development sectors and therefore it would be relevant to undertake a multi-sectoral analysis of the impact of those factors on motivation, performance and quality of the entire workforce of a sector.
- Linked to the former point, it would be relevant to **understand what exactly distinguishes CHW approaches in health from CBW in agriculture.** Rivera (2008) states that the contrast is to be found in the fact that agricultural producers are part of the workforce themselves which is not the case for consumers of health care (but to a limited extent this is valid for preventive care for which communities are actually being involved). A second difference may be that agricultural services are provided in a competitive environment and are consequently more a private than a public good.
- **Considering alternative and/or complementary approaches to rural human resource development** that look at collective performance instead of individual performance. Examples are non formal education and competency-based skills development.
- **Understanding the opportunities provided by decentralization** and the impact of the transfer of public service providers, including CBWs to local government service.

6 References

Assane A., Diabaté H., Dia B., et Tadjou F, T. Hilhorst (ed.) (2007). Renforcer le leadership pour le changement ; Approche et résultats d'un programme de formation-action en Afrique de l'Ouest et du Centre. SNV Afrique de l'Ouest et du Centre, CS-FEMAC, ORFED, Institut Royal des Tropiques (KIT)

Campbell, B. and Shackleton, S. (2001) "The Organizational Structures for Community-Based Natural Resource Management in Southern Africa." *African Studies Quarterly* 5, no.3. <http://web.africa.ufl.edu/asq/v5/v5i3a6.htm> (accessed 13 september 2010)

Khalil A.H.O. et al.(2008) Extension worker as a leader to farmers: influence of extension leadership competencies and organizational commitment on extension workers' performance in Yemen. In: *The Journal Of International Social Research Volume 1/4 Summer 2008* http://www.sosyalarastirmalar.com/cilt1/sayi4/sayi4pdf/khalil_and_vd.pdf (accessed 15 september 2010)

Lelo, F. et al. *Capacity 21 Kendelevu toolkit: A manual for trainers in participatory and sustainable development planning*. South Africa, Affiliated Network for Social Accountability. http://www.ansa-africa.net/uploads/documents/publications/Kendelevu_Planning_Toolkit_Sept2006.pdf (accessed 14 September 2010)

Mbullu. P. (2007) *Community-based worker systems: guidelines for practitioners*, South Africa, Khanya-aicd. <http://www.khanya-aicdd.org/publications/CBWGuidelinesWeb.pdf> (accessed 14 September 2010)

Nemes, G. (2005) *Integrated rural development - The concept and its operation*. Budapest: Hungarian Academy of Sciences, Institute of Economics

Qamar, M.K. (2005) *Modernizing national agricultural extension systems: a practical guide for policy-makers of developing countries*. Rome: FAO.

Ribot, J.R. (2004) *Waiting for democracy: the politics of choice in natural resource decentralization*. Washington: World Resources Institute.

Rivera, W.M., Van Crowder, L., & Qamar, K. (2001). *Agricultural and rural extension worldwide: Options for institutional reform in the developing countries*. Rome: FAO/SDRE.

Rivera, W. M., & Gary, A. E. (2008). Human resource development for modernizing the agricultural workforce. *Human Resource Development Review*, 7(4), 374-386.

Swanson, B.E. and R. Rajalahti (2010) *Strengthening Agricultural Extension and Advisory Systems: Procedures for Assessing, Transforming, and Evaluating Extension Systems*. Washington: Agriculture and Rural Development Discussion paper 45.

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Transparency International - Africa Education Watch (2010) *Good governance lessons for primary education*. http://www.transparency.org/news_room/in_focus/2010/african_education_watch#6 (Accessed 13 September 2010)

UNDP (2009) *A user's guide to measuring gender-sensitive basic service delivery*. Oslo, UNDP

Vijayaragavan, W. and Y. P. Singh, Chapter 14 - Managing human resources within extension. In: *Improving agricultural extension. A reference manual*.

Wanyama, L.O. et al. (2010) *Assessing factors influencing farmers to join and participate in farmer research groups in north rift region of Kenya*. Kenya: KARI.

World Bank (2000) *Decentralizing agricultural extension: lessons and good practices*. Washington: World Bank.

Tewodaj M. et al. (2009) *Access to and Governance of Rural Services: Agricultural Extension and Drinking Water Supply in Ethiopia*. Washington: IFPRI.

Theisohn, T. and Land T. (2006) *Incentive systems: incentives, motivation, and development performance; a UNDP capacity development resource*. New York, UNDP, Capacity Development Group