

The Role of Community Knowledge Centers in enhancing Agricultural and Community Development through Information Exchange.

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Abstract

Community Knowledge Centers (CKCs) are community-based facilities equipped with appropriate ICT tools to enhance information generation (from within and without – e.g. indigenous knowledge and market information on one hand, and research findings on the other hand respectively), dissemination and skills development for local communities in African developing countries. They are equipped with materials like books, newsletters, journals, research reports and electronically stored information that include CD ROMs and web-based resources. Mabamba and Lukwanga CKCs are such centers initiated by Nature Palace Foundation and Arid Lands Information Network with Environmental Alert, respectively. In both cases, community participation is key. Such knowledge generated is shared locally using leaflets and notice boards and also internationally using internet-based world space technology. In turn the communities are able to access information on markets, pests and diseases management, weather predictions and advice etc. Through this exchange communities have been able to find solutions to their pressing problems in agricultural activities like ‘peculiar’ pests and have been able to increase their profitability using market information provided. CKCs make the media, ICT tools and scientific research more relevant to the grassroots farming communities and provide good entry points for increased use of new research findings in agricultural development.

What are Community Knowledge Centers?

A simple Description of a Community Knowledge Center (CKC)

CKCs are centers equipped with appropriate ICT tools to enable information generation, access, dissemination and skills development for the community. The CKCs have library materials like books, newsletters, journals, research reports and electronically stored information on CD ROMs and web-based resources. They are centrally located for ease of access by communities. CKCs facilitate continued community information needs assessments to ensure appropriate information resources are availed.

Objectives of CKCs

1. To increase information and knowledge capacity of communities and enable them to turn past experiences into lessons;
2. To enhance documentation of local content, share knowledge and offer training and discussion room for community workshops, exhibitions etc;
3. Offer linkage points with other organizations and serve as referral point for communities, and other interested stakeholders.
4. Providing information to tourists and visitors i.e Mabamba CKC.
5. Continuous community information needs assessment with key emerging needs.

Services and Activities of CKCs

1. Local content generation and dissemination: CKCs collect and document relevant local agricultural and community development information and disseminate it using ICT and other tools like community notice boards.
2. Basic Computer skills trainings: CKCs train local communities in basic computer skills with the aim of developing their capacity to access and utilize development information using ICT.
3. Access to development publications: CKCs collect and archive development publications like newsletters, journals, etc which can be accessed by community members.
4. Acquisition of information resources: CKCs also facilitate sharing of information generated other CKCs and institutions eg. Research findings using ICT tools which help farmers get answers to particular situations.
5. Outreach activities to communities and schools: CKCs organize outreach activities with the aim of getting the young generation into using ICT tools.

Role of Community Knowledge Centers in Agricultural and Community Development

I. Weather Information

CKCs provide monitoring and dissemination of weather/environmental information that has a bearing on food production. This ensures adequate preparedness and timely response by communities and other actors. This is becoming outstanding important as seasonal variation are on an increase with climate change patterns among the poor rain-fed agriculturalists.

II. Market Information

Market information is an important component in encouraging production. When access to the most competitive markets is guaranteed, there is a positive influence on those engaged in production. CKCs provide market information services and expose producers to a wider market and ensure that they are not exploited.

III. Knowledge Sharing

CKCs facilitate development of data bases for storing, accessing and sharing modern and indigenous knowledge. Through such avenues, knowledge can be passed between groups of people in remote areas. Access to such information helps in addressing challenges in production, since producers can emulate and adopt successful production approaches from different parts of the world.

IV. Early Warning Systems

Free flow of information between communities in remote area is important if governments in developing countries and development agencies are to quickly respond from natural calamities e.g. invasion of locusts, army worms, as well as outbreaks of both plants and animal diseases.

V. Production and Extension

CKCs provide information for monitoring production trends and present timely projections that can be used to influence policy decisions. They can also be used to provide extension services to help improve production.

Current Capacity of the CKCs

Table 1. Current Capacity and resources of Lukwanga and Mabamba CKCs

	LUKWANGA CKC	MABAMBA CKC
Location	Peri-urban Market Gardening community	Rural farming community next to Mabamba Ramsar site, a tourist attraction
Incentive to start CKC	Organized farmer groups that were working with Environmental Alert in the area of sustainable agriculture	Started as a tourism Information centre and community members started using the facility for skills development and Information sharing
Resources/Equipment	Computer	Computer
	Internet connectivity	
	Hydro power grid	Generator
Required Facilities/Equipment for better performance and Impact	Photocopier	
	Community Radio	Video Equipment
		Internet connectivity
		More reliable power (Solar)

Community Participation

To ensure success and sustainability of CKCs, community participation is key. There are various ways through communities are participating in the management and monitoring of CKC activities.

- I. **Advisory Committee:** Drawn from local community stakeholders, selection ensures that membership is gender-balanced, represents interests of special groups and has diverse background. It has representations of local governments, local NGOs, CBOs, women and youth representatives. The advisory committees offer guidance on the center's roles, operations and objectives. They formulate operational rules, guidance and information collection policies. The committees also carry out regular monitoring and evaluation of centre programs.
- II. **Community Information Volunteers:** Nominated from the community and trained to catalyze information exchange and networking activities at community level. They enhance speedy information generation, dissemination and skills development at the centers.
- III. **Broader community Involvement:** In establishing the CKCs, local communities are encouraged to participate in offering voluntary services to learn new skills to support the centre. For example, in construction of the building housing the Mabamba CKC, communities provided sand, bricks, and manual labor- while Nature Palace Foundation provided other items which could not be provided by the community e.g. cement and iron sheets for roofing.

Some current achievements of the CKCs.

- I. Farmers selling products at better prices and increased production
- II. Better pests and Disease management
- III. Farmers are losing less from bad timing because of prior advise on weather and seasons.
- IV. Tree planting
- V. Making of modern brooders and granaries for produce.

Challenges

- I. Documentation is not always a priority to the communities! Their priorities are in addressing their immediate needs such as food security and Income generation – but which require documentation according to CKC design.
- II. Resources and equipment currently available do not support effective documentation and dissemination of agricultural and community development information as required.
- III. Reliance on long-term volunteers has its short-comings.

Future Plans

I. Integration of Video and Climate Change Information

Videos are a very useful tool for the dissemination of both technologies and institutional innovations. Producing and disseminating videos also help identify constraints and solutions to local challenges. The result is a much greater impact. (Africa Rice Center).

Integrating Climate Change Documentation.

Climate Touch Africa: Using Video to document and argument Climate Change in Africa. Climate Touch Africa is a programme that intends to use video to document and argument Climate Change in Africa – with particular emphasis on Uganda and East African countries – integrated in the CKC network. This is based on the notion that in Uganda and most African countries there are many Climate Change Impacts affecting especially the heavily natural-resource-dependant poor communities which are not documented and therefore remain unknown. This results in various actors not having a clear picture of what is on the ground which could inform their plans and programs. At policy level, the decisions that are made without vivid knowledge of the forms and extent of climate change impacts among the grassroots communities miss out some important points; in most cases underrates the extent of such impacts and results into making policies that are not very relevant to the needs of the wider layer of the population.

Other future Plans.

LUKWANGA CKC			MABAMBA CKC
Community Radio			Climate Touch Africa: Using Video to document and argument Climate Change in Africa
Solid Waste Recycling	Demonstration Site		Reliable Internet connectivity
More Reliable Power			

Lessons Learnt

- I. There is need to demonstrate the value of documentation at community level and should not be limited to text and reports but realization of end products like increased production, better prices for produce. Etc.
- II. Simple appropriate technologies and information can provide rural women with an increase in income.
- III. Simple appropriate technologies can help to improve livelihoods through increased food production, diversification of income sources and the development of entrepreneurship.

- IV. Participation of rural communities in programs that are intended to develop them socially and economically gives them the power to transform their lives.
- V. Although the diffusion of knowledge and technology in rural communities in Uganda is a rather slow process, which is also hampered by cost and affordability, access to information can be improved through Community knowledge Centers.

References

NGUO J., 2008. Role of ICTs in Food Security, *Baobab*, 52, 1-2. DOI.

WANVOEKE T.J, 2010. Moving Pictures, *Kilimo – Magazine on Low External input Sustainable Agriculture*, 1 (3): 16-18. DOI.

ACHORA J. 2009. Community Info Centres, Changing Women's lives in Uganda, *Kilimo – Magazine on Low External input Sustainable Agriculture*, 1 (2) 27-28. DOI.