REPORT TOPIC: ORGANIC FARMING AND SOCIAL CAPITAL APPROACH IN THE RESTORATION OF SUSTAINABLE AGRICULTURAL LIVELIHOOD IN A POST-CONFLICT SETTING: A CASE OF NORTHERN UGANDA

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Executive summary

This report presents a discussion of how organic farming and social capital development can contribute towards the restoration of sustainable agricultural livelihood in a post-conflict setting; with a case study of Northern Uganda. Strictly speaking, the paper goes beyond a simple exposition of the value of organic farming, but it attempts to explain the complex ways in which social capital relates with organic farming to revitalize sustainable agricultural systems, and impact on the livelihood of communities in a post-conflict situation, with respect to household food security and income.

The report hereby presented was produced based on a working method of “Colleague supervision”, involving scheduled meetings with colleagues who co-participated in the “Organic Agriculture in a Development Perspective” course from 21st January, 2012 to the 16th May, 2012. By this method, interactive students’ group discussions were arranged between March and May, which involved formulation of the report scope, report structure, guiding direction of the report focus and selection of relevant literatures, based on the chosen situation and background knowledge of the problem identified in this report. It was from such mutual group interactions with colleagues that this report is finally presented, with immeasurable feedback from colleagues in pointing out inadequacies, omissions and suggesting areas of refinement.

Key words: Organic farming, social capital, sustainable agricultural livelihood, agro-ecological methods, post-conflict, food security

1.0. INTRODUCTION

1.1. Background

Agricultural livelihood restoration is an important strategy for the reconstruction of communities in a post-conflict situation because it allows opportunities for the reintegration of demobilized combatants and the affected community at large, whose livelihoods were hijacked from them during the turmoil; thereby enhancing their livelihoods. Unfortunately, there is limited knowledge about agriculture-based strategies that can best be applied for sustaining peace, promoting cooperation among formerly hostile groups, integrating former combatants into the rehabilitation of rural economies, and helping displaced persons to resume their sustainable pre-conflict agricultural livelihoods (Birner et al., 2011).

Agriculture is the backbone of Uganda’s economy and constitutes the major livelihood source of the country’s population. A comparative view from the rest of Sub-Saharan Africa (SSA) indicates Uganda having one of the most rapid economic growth and better performance in reducing the percentage of its population below the poverty line, with a significant decline in absolute poverty from 56% in 1992 to 24% in 2010 (MAAIF, 2007 and UNDP, 2012). The country has generally been regarded as a self-sufficient nation in terms of food production due to climatic, economic and social factors that stimulate agricultural production.
Out of over one million certified organically managed agricultural land in SSA, Uganda has the largest share (227,000 ha) and is recognized for having one of the highest growth rate of organic agricultural sector in Africa (IFOAM, 2011). Over 75% of the farmer population comprises smallholder farmers whose holdings are rural-based and are, however, characterized by severe poverty. In spite of the phenomenal success in organic agricultural development, out of the 34 million population 6.1 million (21%) of Ugandans today suffer from undernourishment, with 31% of population living below one US dollar a day (UNDP, 2012).

1.2 Northern Uganda in perspective: Situational analysis

When compared to the rest of the country, however, Northern Uganda (mainly comprising Acholi, Lango and Teso sub-regions) significantly lags behind in terms of human development indicators, with generally poor welfare indices due to the impacts of the 20 year insurgency (between 1986 and 2007). The conflict events had devastating consequences, eroding people’s livelihoods, and creating wide regional disparities with 60% poverty rate, i.e. around double the rest of the country’s rate; literacy rates lower than national average, and a significantly higher child mortality rate (MAAIF, 2007 and ACTED, 2010).

The pre-war atmosphere in Northern Uganda was that of peace and love, where fellow-feeling, friendship and sharing were such cherished societal values based on long tradition of communalism. In this context, the strong social bond encouraged families and community members to customarily render necessary communal support to each other. However, the protracted conflict that constrained about 2 million (90%) of the population in internally displaced people’s camps (IDPs) for nearly 15 years completely disrupted the community social support network that in the past bolstered their agricultural livelihood. Consequently, as relative peace returned for the people to move back to their original homeland to reclaim their lives, the region continues to reckon with numerous challenges, such as community and patrilineal land conflicts due to broken community and family structures. This negatively affects agricultural recovery and diminishes positive externalities for livelihood improvement from most development programmes.

Besides, many years spent in the IDP camps created a syndrome of ‘food-aid dependency’, as the people lost the potentials and opportunities to engage in agriculture; thereby having the only option of relying on relief. As a result, the traditional farming knowledge and practices that sufficiently sustained the people for generations prior to the war is apparently diminishing amongst the generation. Young people therefore lack the necessary farming skills, the capacity and the mindset to embrace agricultural innovation and technology as an alternative to urban service-based livelihoods.

Much as organic farming system has been widely adopted in most parts of the country, Northern Uganda’s organic sector has not had much prominence in the region and it may sound unpopular amongst most local communities, except for some few smallholder farmers who produce and sell organic products such as cotton, sesame and Shea nut. Consequently, the agricultural sector in Northern Uganda is currently underdeveloped and relatively unproductive,
with annual growth rate of only 1.9% compared to 6-10% annual growth rates in other regions of the country (ACTED, 2010). This low agricultural productivity has resulted into massive livelihood challenges such as poverty and household food insecurity.

In this context therefore, what role can organic farming play in the restoration of sustainable agricultural practices, knowledge and skills amongst the communities in Northern Uganda? How can organic farming contribute to rebuilding the shattered social capital base in the region’s post-conflict setting? How can the synergy between organic farming and social capital provide the basis for sustainable agricultural livelihood restoration in Northern Uganda’s post-conflict era?

The purpose of this paper is to discuss the framework within which organic farming and social capital can contribute to the restoration of sustainable agricultural livelihood in a post-conflict setting of Northern Uganda. This specifically involves examining the potential role organic farming can play in restoring sustainable agricultural practices and knowledge in the region (citing examples from Western Uganda). It also includes analysis of the relationship between social capital and organic farming, with an overview of the context in which social capital building can develop in organic farming system. Finally, the paper presents the ways in which organic farming and social capital could contribute to the communities’ livelihood restoration, with respect to household food security and income.

2.0. **Organic farming concept and its role in the development of sustainable agricultural system**

The concept of organic farming by definition is regarded as a holistic agricultural production system that enhances agro-ecosystem health by emphasizing ecosystem management rather than reliance on external agricultural inputs; building on traditional agriculture and utilizing both traditional and scientific knowledge. It is a sustainable production system that aims at creating an integrated, humane, environmentally and economically viable agricultural system, relying on local resources, and the management of ecological and biological processes; biodiversity, thus ensuring minimum adverse impacts on natural resources (UNEP-UNCTAD, 2008). Organic farming is generally based on the principles of Health, Ecology, Fairness and the principle of Care (IFOAM).

The above concept therefore underpins organic farming as a production system that can revitalize sustainable agricultural livelihoods through the regeneration and integration of traditional and new scientific farming knowledge and practices in a way that sustains the health and resilience of soils, ecosystems and the people. Thus, organic farming can be seen as an “insurance policy” for sustainable agricultural livelihood security. **Sustainable agricultural livelihood security** in this context refers to ecologically sustainable agricultural production that neither exposes local farmers to unacceptable levels of economic and environmental risks, nor results in socially destructive increases in levels of local inequality (Getz, 2008). Figure 2.1 below illustrates the dimensions of sustainability in Organic farming system.
The sustainability aspect in organic farming system (certified or non-certified) integrates the concepts of resilience (i.e. the capacity of the system to resist shocks and stresses) and persistence (i.e. the system’s capacity to continue over longer time periods) under changing conditions, while addressing wide range of environmental, social and economic objectives (FAO, 2011). The ‘bottom-up’ approach involving local people and locally available resources, in combination with both traditional and scientific knowledge in organic farming improves the resilience of agricultural system to external shocks, and accumulates environmental goods and services that ensure sustainable production system for the current and future generation. As Altieri (2002) states, the very systems developed and inherited by traditional farmers throughout the centuries should be the starting point for new pro-poor agricultural development so as to sustainably manage harsh environments and meet the subsistence needs of the people without depending on chemical fertilizers, mechanization, pesticides and other modern agricultural technologies.

Although agriculture in Northern Uganda currently faces various environmental stresses (e.g. drought, declining soil fertility, pest and diseases, climatic variability, etc.), wide adoption of organic farming and the promotion of sustainable agro-ecological techniques such as crop rotation, cover crops, intercropping, agro-forestry, mulching, natural pest control, composting and nutrient cycling, can offer the alternative for reasonable production level and healthy crops and animals (EPOPA, 2008). These practices promote the long-term positive impact on the environment (ecosystem health) such as maintenance of soil fertility, soil water retention; nutrient cycling; biodiversity and other associated social and economic benefits. An example in
Figure 2.2 below is cited from Western Uganda where Organic farming has shown a high degree of success.

![Figure 2.2. Organic farming and agro-ecological methods in Western Uganda](image)

**Figure 2.2. Organic farming and agro-ecological methods in Western Uganda**

Source: Adapted from Mette et al. (2011)

Organic farming system can therefore offer a huge beneficial brand in the recovery of sustainable agricultural system through the application of agro-ecological methods that mimic natural processes. In fact, the combination of traditional and scientific agro-ecological methods and knowledge leads to eco-intensification of production (i.e. maximization of yield) on limited available land, based on good soil management practices. This organic approach could therefore potentially benefit the local community living on marginal land where they are constrained by limited land size to maximize productivity.

But given the existing social disconnection amongst the people, how can this wealth of integrated time-tested sustainable organic farming and agro-ecological methods be widely embraced by the communities to boost their agricultural livelihoods? In this context, it is important to first bridge the wide social gap created by the long conflict situation amongst the communities in Northern Uganda, as this would provide the window of opportunity to address other livelihood constraints. In view of the above, the relationship between organic farming and social capital, and how their inter-play could respond to the problem situation is explored in the next section.

### 3.0. Social capital building in organic farming

The inherent multifunctional nature of agriculture makes it able to influence and address the factors that contribute to community livelihoods. For this purpose, organic farming contributes by building up over time, stocks of capital assets (i.e. natural, human, social, physical and financial assets) that promote livelihood security (Hine et al., 2007). In organic agriculture,
social capital is regarded as the most valuable resource, as it provides the opportunity for accumulation of the human, natural, physical and financial capital assets.

Social capital in this case refers to the capacity of individuals in a community to come up together with a common purpose, based on mutual trust, norms, shared values and networks so as to facilitate coordinated actions and decisions with the aspiration of improving the efficiency (life) of the society. It involves the individuals’ or community’s capacity to access, mobilize and utilize resources for growth and social support that produces long term benefit for both the individuals and the community as a whole (Munene et al., 2005).

However, social capital in organic farming may be hampered by the perceived indifference amongst the community members in the post-conflict situation, as they struggle to let go of their haunting past! However, it is known that social capital cannot be spontaneously borne in a community. It is from few determined individuals with the same fundamental interests and values for better life in the community that social capital building, organic farming and livelihood success can spring; even in a situation where the state’s capacity is limited. This usually occurs when such individuals come together, pull up their limited resources and invest in agricultural ventures. With time, their success stories will persuade and motivate others to join thus building up the group and expanding their network in the community. This internal networking amongst the community members may then further extend to include trusted local actors for further support and partnership (e.g. Religious organizations, local NGOs, Producers’ cooperatives, Parents-teachers’ associations, etc.).

According to Getz (2008), the key to facilitating ability of community members to attain sustainable livelihood security involves “scaling up” and developing more positive, external linkages in addition to internal networks, whereby extra local actors, including local government authority, regional or national NGOs, and international agencies, develop vertical relationships with community members; squeezing out corrupt local leaders and promoting positive change at the community level. Such a move would therefore shape the community’s social structure and strengthen the capacity of local leaders and the groups in settling community-related disputes like land disputes, and setting the stage for livelihood recovery. This strategy based on mutual trust, ownership and accountability could therefore vest upon the local leaders the authority and mandate to initiate reconciliatory measures to settle community grievances and unify the people thus boosting their engagement in agriculture.

3.1. Relevance of social capital in organic farming

It is within the group settings that grassroots-level participatory agricultural recovery initiatives develop, through a dynamic farmer empowerment approach (e.g. Farmer field schools, FFS); where farmers build on their pooled skills and knowledge, tested through collective experimentation; and learn new knowledge to make appropriate agricultural practices and have access to quality inputs, markets and credit facilities (ACTED, 2010). Therefore, organic farming promotes social capital building through the formation of new and different groups in a community to get involved in agricultural production and trade where they were previously excluded for financial and security reasons.
The importance of social capital as the main focus in organic farming development for sustainable agricultural livelihood is because organic farming is a knowledge-intensive production system that demands knowledge about ecosystems and natural or biological processes. This, together with the need to exercise collective responsibility for taking care of the natural resources cannot be possible unless a sense of collaboration and ownership is embraced by other members of the community.

As illustrated in Figure 3.1 above, when people come together for a common purpose, they can learn from one another (Figure 3.1 a) and improve interpersonal communication amongst them. The group could then be able to set up communal demonstration farm sites (Figure 3.1 b), where they can experiment on their knowledge and apply it on a wider scale. This information exchange, therefore, not only improves the interpersonal communication in the community, but more importantly leads to fusion of knowledge and ideas in which the uneducated members and the educated members value each other’s ideas, develop confidence and gain from the social environment. This consequently eliminates a situation of social exclusion that usually arises due to differences in educational status in the community. Such initiatives would motivate others to become part of the group and this fosters stronger social cohesion so that the people can take responsibility for the resources in the community.

In addition, organic farming and agro-ecological methods are labour-intensive. This labour demand calls for the need to work corporately so as to effectively and efficiently undertake agricultural production and respond to other challenges in the community. It still reflects the fundamental importance of corporation, knowledge, learning and experience exchange, in accordance with local conditions to solve context-specific problems. For instance, creating water trenches, terrace making for erosion control, weeding, devising local strategies to combat local invasion by pest and diseases, communal construction and conservation of water sources, etc. All these are conditions under which organic farming development can bring together all members of the community.
4.0. Impact of Organic farming and Social capital on community livelihoods: Household food security and income

In this section, an analysis is presented of how organic farming can specifically contribute to improving community livelihoods with a focus on household food security and income, under a well-built social capital asset. According to De Schutter (2010), it is necessary to adopt a low-carbon resource-preserving sustainable system of agriculture that can benefit the poorest farmers by increasing their incomes, and ensuring food availability of smallholder farmers (i.e. at household level). In this regards, agriculture must not compromise its ability to satisfy the livelihood needs of the poor smallholder farmers, address poverty and must meet their future needs.

The means by which access to necessary resources that ensure immediate and long-term survival of households or community can be derived and maintained constitute their livelihoods. Generally, agricultural production based on organic principles is currently recognized as a major approach to sustainably stimulate agricultural growth and livelihoods; reduce food insecurity, combat poverty, prevent dependency and enhance self-reliance; as well as build a set of specific skills amongst smallholder communities which may positively impact on their well-being and future opportunities. In agreement, several case studies have indicated that the introduction of Organic farming methods have indeed improved farmers’ food security (Halberg et al., 2005).

In Northern Uganda, as anywhere else, low agricultural productivity and poverty in the aftermath of war are among the causal factors of food insecurity amongst the population because of limited household capacity to produce and purchase sufficient food. This limitation particularly arises and perpetuates due to low social capital. Hence, social capital is the key to stimulate organic crop and animal production in the community with large yield returns that can supply household food needs. This is in view of the evidence that agricultural yields in organic systems are often higher and more stable when converting from low-input systems in developing countries, to the level of, and even surpassing yields in high input conventional systems (UNEP-UNCTAD, 2008).

The proven stable and higher yield in organic farming implies that organic farming is capable of addressing household food security in terms of ensuring access, availability, utilization and stability of food in the community. In this case, increased quantity of food produced per farm enables all household members to have access to enough food thus improving household food security. Besides, the network built in the social structure provides a mechanism within which the benefits can spread to everyone, even those who are not part of the group network, since the community network also provides an informal household safety net (insurance) to pursue higher returns and reduce food insecurity of other households. In agreement, Getz (2008) states that the economic benefits of Social capital also have positive spill-over effects for those who may not be part of dense social networks. It is indicated that high village-level social capital increases the food security and incomes of both those households that heavily invest in social networks as well as those in the same village who are not directly in the social network, although with unequal magnitude of returns in either scenarios.
Besides the high organic productivity level that ensures food availability for domestic consumption, the food surpluses can be sold at the local markets from which the communities can boost their household incomes, and develop their purchasing power to enrich their diet and obtain other household necessities (Figure 3). In addition, organic farming ensures availability of fresh organic products to more people in the wider community in all seasons, thus maintaining stable food supply to the population and constant local income generation. For instance, the production of vegetables can proceed year-in year-out even with limited rainfall through irrigation, that ensures household food security and constant cash flow. Also worth-mentioning is that, organic farming and social capital contribute to the promotion of other asset accumulation such as human capital, natural capital, physical and financial capital that helps to correct market failures, reduction of inequalities and fostering social cohesion (Longley et al., 2007). This implies the ability to access wide-range of goods and services for livelihood improvement in the community.

Figure 4.0: Surplus production on local market for household income
Source: From Kledal (2012)

Organic farming can reduce poverty and household food insecurity through reduction in economic costs that would be incurred during the agricultural production process since the community would no longer depend on synthetic fertilizers, pesticides, and more costly agricultural technologies. This means the farmers would better benefit by saving the cash that would otherwise be used to purchase those products. Consequently, it can reduce the high annual debts that smallholder farmers face in agriculture thereby motivating even those who might have been driven out of agriculture due to high debts and minimal returns to resume and restore their agricultural livelihoods.

This does not only ensure their household food security, but also higher incomes that make them able to diversify their livelihoods (i.e. off-farm opportunities). For example, they would afford to send their children for higher education, access health care and expand their investments. According to Saferworld (UK) and CECORE (2007), organic agricultural initiative in Shea Nut collection in a small women group in Lira district of Northern Uganda strengthened their social capital and skills in livelihood and social matters, even during the war situation in 2005. This not only extended beyond income generation but also empowered them economically through increased capacity to generate money and expand their businesses. Hence, larger
promotion of organic agriculture in the aftermath of the war could have far reaching positive impact on household livelihoods.

Moreso, the farmer groups, cooperatives and informal community collaboration that establish strong networks with other partners from government institutions, NGOs, and organic support organization (such as NOGAMU and EPOPA) provides wide range of opportunities to the communities through diffusion of innovations (Hobbs, 2000). Through these linkages, farmers would be able to access larger financial credit opportunities and organize for organic certification at lower costs; access export and domestic markets, and have opportunities to gain in-depth knowledge of sustainable organic techniques and markets on a global scale.

In a similar way, organic farming improves household food security and income level based on its incentive of premium prices. The premium prices on certified organic products encourage meaningful economic returns that boost the financial base of the individuals or groups as they are able to earn much higher income rate per product in comparison to products from the high input agricultural systems. However, most farmers would be able to develop better farm planning strategies to balance between cash crops (for export or domestic markets) and food crops production so that the need for income does not compromise household food security.

5.0. Conclusion

Organic farming is an alternative production system based on agro-ecological principles that can revitalize sustainable agricultural system and livelihoods in a post-conflict setting through the regeneration and integration of traditional and new scientific farming knowledge and technologies that sustain the health and resilience of the natural environment (ecosystems) and the people. The introduction of sustainable organic and agro-ecological techniques such as better crop rotation with improved crop varieties, cover crops, intercropping, agro-forestry, mulching, natural pest control, composting and nutrient cycling is a vital step towards the restoration of sustainable agricultural practices, knowledge and skills in Northern Uganda where such vital knowledge is diminishing among the population.

Organic farming can significantly help in rebuilding the shattered social capital base in a post-conflict situation for sustainable agricultural livelihood recovery through stronger social organizations at local levels for collective management of, and access to resources, as well as opportunity for better connection with external policy institutions. The labour and knowledge-intensive nature of organic farming promotes social capital building that significantly improves farmers’ knowledge and skills in organic and agro-ecological farming techniques, as they engage in constant network of mutual interactions and information exchange, and deriving a lot of other associated social and environmental benefits.
Organic farming system and social capital accumulation also leads to restoration of sustainable agricultural livelihood by improving household food security and income level through increased efficiency and quantity of production per farm or household. Sales of surplus production, constant supply of organic food products all year-round, reduced production (economic) costs, group certification and organic premium prices present the huge proven potential of organic farming to address household food security and income, thus ensuring access, availability, utilization and stability of food and diversified livelihoods in the community.

6.0. Recommendations

From the above therefore, it is important that agricultural and livelihood recovery interventions in the region constitute wider integration and promotion of organic agricultural production system through extension services. This would also critically mean enforcing an enabling policy environment and capacity support for agricultural institutions such as National Agricultural Advisory services (NAADS), NOGAMU and other local private sector organizations that can promote farmer-centred agricultural research and knowledge dissemination to the local communities, hence scaling up organic farming in the region.

Since organic farming practices are best adopted when not imposed by a top-down approach, there is a need to initiate a bottom-up approach that responds to the needs of the community, so as to build accountability through increased local community capacity to define their needs, demand and deliver services for self-sustenance. This requires investment in social capital so that learning and cooperative capacity of the communities is built. On this note, community support programmes should be focused on rebuilding the social structure and empowering the local leaders and the communities at large through initiating organic training forum that continuously bring the people together. In otherwords, it is necessary to strengthen pro poor or smallholder support programmes and policy in order to empower the community and enable wide adoption of organic farming with immediate beneficial impact. Therefore, the entry point for implementation of this strategy requires awareness creation among the communities, targeting the youth, women, men and elders of the communities as primary stakeholders and beneficiaries.

It is also necessary that Organic agricultural curricula be integrated in Educational institutions such as Universities and National Teachers’ Colleges in the region so as to train students who would later contribute in the agricultural recovery programmes; where they will be able to initiate and implement organic farming innovations in the communities.
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