

Human Security and Agriculture: A Case study of the One Sky/Friends of the Earth Sierra Leone partnership project.

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*"Peace, development and environmental protection are interdependent and indivisible."
Principle 25 of the Rio Declaration*

Context

Conflict is a major threat to agriculture and food security. Of the more than 40 conflicts in the 1990s the majority were held in countries where agriculture represented a major source of livelihood, foreign exchange and social stability. Food security is disrupted during conflicts and it plays a key role in sustaining peace.

In some cases, conflict is caused by the loss of agricultural land, often done in the name of 'development'. The people of Bougainville, Papua New Guinea rely on subsistence agriculture and hunting and gathering activities. Pollution and the loss of their land from Rio Tinto's enormous open-pit copper mine resulted in a 12 year civil war. In Nigeria, conflict arose when poor industry practices by Royal Dutch/Shell that included frequent oil spills and leaks from toxic waste pits, resulted in drastic declines in agricultural yields, fish stocks and the health of local communities. Large hydro-electric dams can fuel conflict or be used as a weapon against populations. The Ataturk dam, built by the Turkish state that displaced some 60,000 Kurds from their land is a case in point.

Weapons also leave their mark on agricultural inputs releasing toxic waste such as depleted uranium and phosphorus that contaminate soil and water supplies. In some conflicts, the destruction of agricultural land itself is used as a military strategy. The Israeli army has recently bulldozed agricultural land and uprooted over 40,000 fruit trees from Palestinian territory¹. Landmines disrupt agriculture, damage the environment, inhibit the return of displaced persons and refugees, and impede development and relief efforts. Some conflicts are directly caused by land ownership issues as in Nicaragua. However after the Contra war in Nicaragua more people had less access to raise cattle, agricultural products or own land because of landmines. In turn, food prices are high and security threatened. Alternatively, control over cash crops is used as a means to fuel the conflict as is the case with rebels taking hold of cocoa and coffee plantations in Cote d'Ivoire.

Wars directly impact agricultural productivity due to large migrations of populations from conflict areas leaving fertile land idle and livestock abandoned; the destruction of crops and livestock by armed groups; and the destruction or decay of rural infrastructure and transport to markets. When human security is threatened people are also forced to think in terms of short-term needs. Infrastructure such as parks and protected areas become meaningless as armed groups hunt for bushmeat, destroy agricultural facilities, and engage in illegal mining and timber logging for income or trade.

¹ Socio-Ecological Union. Available December 10, 2002 at: <http://www.seu.ru/projects/eng/war/9.htm>

Sierra Leone

Over a decade of civil war in Sierra Leone has dubbed it the worst place in the world to live according to the United Nations' Human Development index. Life expectancy in this West African nation is a mere 36 years. About a quarter of the world's wars and armed conflicts have a strong resource dimension. Sierra Leone is no exception with diamonds fueling the civil war. The country is endowed with mineral, agricultural and fishery resources, but few industries are developed and the majority of the population live on subsistence agriculture. While the country is now officially at peace, it is still reeling from the vicious use of child soldiers and the many forced amputations that were used as a terror tactic by the Revolutionary United Front (RUF). Peace has brought renewed hope and the country is improving daily. However rebuilding, retraining its youth, working towards reconciliation, and regenerating the agricultural sector as well as ensuring food security are all essential ingredients to maintaining peace.



Former child combatants pointing out Sierra Leone.

The agricultural sector traditionally employed 75% of the country's labour force. The displacement of millions of people and insecurity from the war led to a 65% decline in Sierra Leone's rice production and a 70% decline in the volume of export crops from 1996 to 2001². Areas that suffered highest population displacement and highest levels of destruction during the war currently have the least self-reliance on cereals (rice, maize, millet and sorghum). The Kono District, rich in diamonds, is producing only 21% of its requirements. Most livestock were killed and post harvest facilities vandalized during the conflict. Fishing infrastructure was destroyed leading to a drop in fish production to 50% of pre-war levels. Increasing

population pressure around urban centres from displacement led to an increased consumption of fuel wood which caused a massive depletion of forests. Other environmental damage from the war included illegal timber logging, unregulated diamond mining, increased hunts for bush meat, and sanitation and health deterioration from influxes of displaced peoples to certain areas. As a result of all of the above, the country is dependent on food aid, suffers widespread unemployment, has greater poverty and malnutrition, and expanded foreign debt.

Human Security and the Environment:

A Friends of the Earth Sierra Leone and One Sky partnership

One Sky partnered with Friends of the Earth Sierra Leone (FOESL) during the war in 2000 with hopes of peace on the horizon. FOESL was founded in 1987 "in pursuit of human security and a sustainable environment". The links between human health, the economy and the environment lie at the foundation of a sustainable, peaceful society. Without the protection of agriculture, water and natural resources, the impacts of poverty and war are at risk of inflating. In developing the FOESL/One Sky partnership, organic agriculture was seen as a key component to the overall project.

² From Sierra Leonean Government's National Recovery Strategy: <http://www.reliefweb.int/library/documents/2002/govtsle-sle-28oct.pdf>

The Human Security and Environment project is working with marginalized target populations including internally displaced people and war affected children to provide vocational training and educational opportunities in environmentally sustainable activities. We are both working with and for the very people who are feeling the impacts of war the most. Our goal is that by addressing the issues of sustainability in a post-conflict environment and maintaining a positive sense of hope, we can be a small but powerful inspiration and school of change.

At the beginning of the partnership, ideas were exchanged and projects inspired from having FOESL Executive Director Olatunde Johnson visit Canada and the El Salvadoran Centre for Appropriate Technology (CESTA) in Central America. The initial agriculture project developed in Sierra Leone is in the heart of Freetown and named after the Victoria NGO's project "Lifecycles". The principal at the Freetown Secondary School for girls donated the use of their abandoned school yard to be used for FOESL's urban organic gardening project. The location is central, visible and accessible to both the girls at the school and the general population.

With few resources in the war-torn country, organic agriculture is a viable and sustainable means for cultivation and teaching about food security. Training programs have been developed and are geared towards former child combatants and internally displaced peoples. Participants learn about the importance of organics, composting techniques, soil conservation and improvement, seed production and cultivating techniques including row cropping and proper tillage. They are given diplomas upon completion. Crops planted include cassava, garden egg (eggplant), potato, groundnut, corn, potato leaves, okra and cucumber as well as fruit trees (oranges, lemon and mango). Most of the produce is given to the boarding school for payment of land-use and goes to feed the girls that stay at school in the room and board section. The rest is shared amongst the trainees who have no other means of income. Five internally displaced women who had been squatting on the land have been incorporated into the training program and are a major source of inspiration to the youths engaged in the exercise. Although they are not part of the diploma program it is hoped that the additional training will improve their skills and change their attitudes towards land management.

Due to the success of the urban "Lifecycles" project and goal of FOESL to promote sustainable agriculture further, two satellite agriculture centres have been developed. An organic cooperative was established in Waterloo which was largely abandoned during the war due to refugee movements. The cooperative currently has 25 members, mostly displaced people, women and youth, who are producing rice and saving seeds for exchange and income as well as preparing to plant cassava, potato and yams.

A larger project was developed for the rural village of Lakka/Hamilton where the traditional mainstay has been fishing. Located about 20 km from Freetown on the Atlantic coast, this area has been home to artesanal fishermen and people who have relied on subsistence agriculture as well as gathering from the local forest resource. This area is subject to heavy rainfalls and has lush vegetation growing on very poor, sandy soils. It is subject to extreme erosion problems due to its soils, a hilly topography and deforestation. The influx of Internally Displaced People (IDPs) has put a lot of pressure on resources in the area including the forests which are logged indiscriminately for



Woman planting at the Waterloo Co-operative

commercial fuelwood and charcoal, and the mangrove swamps which play an important role in the juvenile stages of local marine resources. Due to high unemployment and poverty, youths have desperately resorted to digging the beaches in Hamilton for sand which is in high demand to rebuild destroyed infrastructures in the capital Freetown. These activities are a serious threat to local resources and ultimately local livelihoods.

Through its relationship building, grassroots nature and hard work, FOESL was given land by elders in the village of Hamilton to build an Appropriate Technology Centre that would provide training and employment opportunities to the local population as well as model sustainability.

The Eco-Centre was inaugurated on Earth Day in April 2002 with over a thousand participants attending the celebration. It was named in honour of Ricardo Navarro of CESTA and modelled after his organization's appropriate technology centre in El Salvador. The Centre offers training programs in pedal-powered tile-making, bicycle mechanics, gara-dyeing and soap-making, organic agriculture and animal husbandry. They also set up a tree nursery (12 plots of trees) and planted 100 trees along the boundary for shade, privacy and against noise pollution.

This year One Sky hosted Program Coordinator Christopher Buzie to Canada for three months during the planting season. He was able to visit various organic agriculture programs in Canada including the Fallsbrook Centre and the Nappan Project in New Brunswick and the Northern Roots organic agriculture program in Smithers, where he developed knowledge of Canadian techniques as well as gained some exposure to literature and ideas in the organic agriculture world that are more readily available in Canada. In turn, he also shared his knowledge at various school talks and conference presentations.

Working on environmental training and education projects during this post-war reconstruction phase is vital to ensuring sustainable development. While many international assistance programs exist there are few, if any, groups that are working on the pressing issues of environmental sustainability in a conflict or post-conflict situation. This project has been addressing the issues of poverty eradication, environmental education and sustainability by targeting marginalized and war-affected populations.

Challenges and Lessons learned

There are several challenges to working in a post-war environment including instability, lack of infrastructure and resources, resettlement of people, lack of education, social issues and trauma. At the same time, it is an exciting moment that carries a lot of hope and enthusiasm for peace and change. There is an enormous need to provide sustainable opportunities for training and employment to war-affected peoples. The problems seem overwhelming at times so it is important to keep in mind that while our projects are small, they are significant and do make a difference.

Some of the most valuable outcomes of our project stemmed from the South-South exchange between Sierra Leone and El Salvador. A lot of the ideas generated for the



FOESL Director Olatunde Johnson learning about the tile maker at CESTA.

Appropriate Technology Centre in Sierra Leone came from CESTA, including the design for a pedal-powered tile maker.

For the organic agriculture component, the biggest challenge has been around water. Research needs to be done on how to maximize irrigation efficiency and water conservation during the dry season and prevent flooding and erosion during the rainy season. Another challenge has been tracking the success of the training program. Other than a small number of the participants, communication challenges and the reintegration of displaced peoples makes it difficult to follow-up on past participants to see if they are applying their knowledge effectively.

Outstanding issues

The link between human security and the environment is gaining increasing attention but is still not a priority internationally and is not reflected at the policy level. One of the outstanding issues in this field is the lack of political will and priority to redirecting military budgets toward the elimination of poverty and thus toward food security. In an attempt to restore peace in Sierra Leone, West African countries within the group ECOWAS (Economic Community for West African States), diverted a lot of resources in maintaining troops in the country despite the pressures of domestic unemployment and hunger. The Sierra Leone war consumed as much as 75% of the government's financial and material resources and wrecked many sources of government income.

In Sierra Leone, like all other African communities, peace can be maintained by simply building people's capacity of meeting their basic needs of food and shelter. Basic as this may be, it is the main cause of the several conflicts that are tearing much of the continent apart. This outstanding issue can be resolved with minimal input...it is a matter of commitment. By engaging people in skills training, particularly in sustainable agriculture for self-employment and food security, we would be directly addressing these issues.

Conclusion

Sierra Leone has been such a high priority for the U.N. that it has one of the largest peacekeeping operations in the world. Recent events in the Ivory Coast, conflicts with Liberia, Guinea and transnational refugee movements have seriously destabilized the region where some of the most extreme poverty in Africa has been running rampant. A number of initiatives are in place to help restore agricultural productivity in Sierra Leone such as giving resettlement rations for displaced peoples returning to areas of origin (deemed safe for people to return to). When the rebels disarmed, roughly 450 weapons were cut into pieces daily and converted into approximately 4,000 productive tools such as hoes, sickles, cutlasses, shovels, axes and other garden implements, with the participation of ex-combatants. The move was symbolic of peace and the need to restore the agricultural sector.

The FOESL/One Sky project is definitely small-scale in comparison but makes a significant difference. The project developed from a desire to face the worst conditions in the world with a spirit of cooperation and hope. It is about people helping people.