# United States Agency for International Development Bureau for Democracy, Conflict and Humanitarian Assistance Office of Food for Peace

Fiscal Year 2010: Title II Proposal Guidance and Program Policies Supplementary Fiscal Year 2010 Title II Multi-Year Assistance Program Country Specific Guidance: Liberia

## Food Based Crop Insurance and Community Food Reserves

Using "Food as Food" to raise rural incomes, stimulate agricultural productivity growth, and reduce vulnerability to food insecurity

## I. Background

"Food as food" is used effectively by the Office of Food for Peace (FFP) and its partners for a variety of food security objectives (prevention of malnutrition, food for education; food for work; general relief, etc). However, agriculture (AG) and natural resources management (NRM) programs thus far remain largely dependent on monetization: tools, seeds, and the salaries of extension officers are paid with cash, not food. Yet, and as discussed below, "food as food" can play a legitimate role in AG programs, and powerfully complement cash-based interventions in this sector.

## II. Setting the stage

Farmers everywhere face weather, pest and market-related risks. The poorest farmers usually manage those risks by choosing crops and practices that provide stable, but sub-optimal, economic returns. This results in smallholders foregoing the technological changes that could enhance their chances at longer-term productivity gains and, eventually, income growth. Further, because smallholders face risks and generate lower than optimal returns, lenders are discouraged from offering them credit, creating further obstacles to productivity growth.

Innovative models have been recently proposed to reduce the uncertainty of farm income, involving simple *area-based crop insurance schemes*. Those generally involve cash payment to compensate for yield losses in the case of unexpected hazards. No one to our knowledge has yet attempted to use "food as food" in the form of crop insurance; yet this appears to present distinct opportunities, especially when paired with other form of local initiatives such as community food reserves in the form of inventory credit (IC) schemes. The use of food rather than cash may be particularly appropriate when: (i) the threat of widespread malnutrition is high; (ii) markets function poorly; (iii) inflationary risks are high; (iv) cash transfers are not practical: and/or (iv) effective targeting is sought. This paper examines how food-based risk insurance and ICs can be used, preferably jointly, to improve local access to food while giving farmers greater liberty to devote land, labor and capital towards riskier but potentially more rewarding investments.

#### III. Food-based crop insurance

Crop insurance is used to compensate farmers for catastrophic income losses and to protect their consumption and debt repayment capacity. By reducing the perceived risk of production losses, the insurance may encourage farmers to adopt more lucrative, but riskier, enterprises. Combined with a strong agricultural extension program, a food-based crop insurance program could invite farmers to

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dedicate a portion of their resources to a new enterprise based on the expectation that, should the expected returns to the new enterprise fail to materialize due to exogenous events (changed market conditions, natural calamities, etc), their minimum livelihoods will be protected by the insurance program. The release of indemnities to farmers is based on an *ex ante* analysis of most likely, verifiable causes of farm losses (drought, floods, hail, pest infestations, etc). To ensure rapid response in paying indemnities to farmers, the program should be coupled with an IC program (see below) which would act as a local, prepositioned food reserve.

#### IV. Inventory Credit Program

ICs operate upon the principles of the temporal price differentials of the normal market cycle. The IC receives grains from local farmers for storage, usually immediately post harvest and holds the inventory as prices increase. With his/her stored inventory as collateral, a farmer can request a loan from the IC to settle his most pressing cash needs, yet maintain ownership over his grain until prices rise again. Once prices have strengthened, the farmer can sell his grain at greater profit, reimburse the loan, and avoid a costly repurchase of grain when prices are higher. Additional benefits are that ICs facilitate good practices at the farm and community level (such as proper storage and post handling processing), minimize transaction costs for commodity traders (thus lowering consumer prices); and may help open credit lines with the formal banking system. Most importantly, however, ICs create a de-facto, pre-positioned food reserve at the local level that gets called upon by the crop insurance scheme when the area-based insurance index reaches critical levels.

#### V. Pastoralist Title II-Based Household Asset Protection Program

Pastoral livelihoods confront specific risks that may also be addressed using food to protect the value of livestock assets. When facing stress due to drought or other cause, pastoralists often resort to selling their animals before under-feeding deteriorates the animals' market value, or their slaughter. Pre-positioned Title II commodities could act as an insurance against such coping mechanisms, thus protecting and preserving the value of the pastoral households' assets facing shock.

#### VI. Structure of the Title II intervention

In the risk reduction strategies described here, the use of food as food is on the creation and replenishment of the local food reserve. The multi-year assistance program (MYAP) provides the initial "grain capital" used to start the scheme and annually, additional grain replaces draw downs made (if any) when insurance payments are needed to respond to food security needs. If insurance payments are not required, (no shocks), it is expected that the food resources will be used for some predetermined and preapproved community activity such as "off the shelf" food for work NRM activities. The outlet of Title II resource is therefore of two kinds: (i) the annual release of food resources associated with the creation of the IC (this outlet may be stabilized over the years as the program establishes itself in new locations on a rolling fashion); and (ii) the unpredictable releases associated with insurance payments in case of shocks.

#### VII. Complementary activities

To yield full effect, the risk reduction activities proposed here require pairing with other development actions. Crop insurance is provided to farmers willing to diversify and take risk. To mitigate such risks, participating farmers should also be supported by a strong value chain analysis, with training in production and post harvest processing techniques. Similarly, pastoralist should be offered training in pasture management, fodder provisioning and income diversification such as hide skinning and meat drying. Resources should also be available for restocking and/or restoring animal health, and for supporting market infrastructures and abattoirs. Finally, strong community extension is needed to train local users in managing the IC scheme (e.g. in warehousing, storage, book keeping, etc). Those complementary activities could be supported by MYAPs or by non-Title II programs. In all cases, solid coordination will be required.

#### **VIII. Conclusions**

This concept note suggested novel ways of using "food as food" to reduce risk in agriculture. Those schemes could take advantage of other resources at FFP (e.g. Famine Early Warning Systems Network for rainfall monitoring) or dovetail with other U.S. Government interventions (e.g. by linking with USAID/Office of Economic Growth and Trade or United States Department of Agriculture programs) to reach a proper blend of resource inputs. The schemes also build upon and promote local organizations' capacities, and may offer openings to private interests once insurance concepts are introduced and accepted. Certainly, many questions need to be studied to properly implement those models. As the schemes get implemented, answers to those questions will be pursued by Food and Nutrition Technical Assistance II (FANTA-2) in collaboration with the International Food Policy Research Institute (a FANTA-II subawardee) so that evidence can supplement, confirm or adjust the concepts offered here.