Fighting malnutrition among the poor:
Project targeting low-income women and children in Kenya and Uganda investigates super-recipe

April 5th, Nairobi, Kenya. A new research project to tackle malnutrition among Kenya's poorest communities will be launched in Nairobi today. The three-year initiative targeting = women and children aged 6–59 months, aims to make quick-to-cook porridge from at least four food groups, affordable for poor communities.

Low dietary diversity among the poor is a key contributor to malnutrition, said the research group. Non-staple grains and legumes like beans can increase diet diversity for a more balanced diet, yet they are often neglected.

"While a family may not have the resources to cook dry beans, vegetables, and cereals three times a day, they can boil this porridge which is bean-based and nutrient dense, affordable, as an ideal supplements in the diet," said Christine Chege, an agricultural economist and nutritionist at the International Center for Tropical Agriculture in Nairobi.

Researchers aim to benefit 50,000 rural and urban consumers, reaching around five million smallholder farmers in Uganda and Kenya by the end of the project. The goal is to make an affordable, nutritious porridge, while linking farmers with processing companies like East Africa Basic Foods and Lasting Solutions to reach low-income consumers.

An analyses of business bottle-necks to bring down costs along the value chain – for example using low-cost, energy-efficient dryers instead of electricity - will be made, and bean farmers will be linked with processors who will buy their products at reasonable prices.

Collecting data to get the bigger picture
"Beans are a nutritious food, and provide a low-cost protein for low-income consumers. That's why they are often called a 'poor man's meat'," said Chege. "Our research aims to combine beans with other less-known but nutritious foods like amaranth leaves."

One cup of amaranth leaves - cooked, boiled, and drained - contains 73% of the daily requirement of vitamin A, 90% for vitamin C, 28% for calcium, and 17% for iron. In addition, beans are a good source of vitamins A, K, B6, and C as well as riboflavin, folate, and dietary minerals, including calcium, iron, magnesium, phosphorus, potassium, zinc, copper, and manganese.

If agriculture is to play a stronger role in improving nutrition, then research must focus more on what happens between production and consumption, say researchers. Evaluating the whole value-chain from farmer to consumer is vital to supply nutritious foods to the poor and evaluate their demand for these foods.

A first step is to analyze malnutrition levels among 600 poor households in Kenya and Uganda. That data will give nutritional information about individual health, where families source food and how much they pay for it. This will help researchers gauge the minimum price for the product, and understand which nutrients are a priority to add to the porridge.

Agriculture, nutrition and city life
Nutritious food markets cater mainly to middle- and high-income consumers, researchers noted, with little attention devoted to lower-income groups. "Nutritious foods are developed, produced, distributed, and marketed in ways that do not take into account the economic and social circumstances of poorer consumers," said ?

Rapid urbanization coupled with rising incomes and diet diversification are also driving greater demand for convenient, quick-to-prepare processed foods. Low-income households typically have a monotonous staple-based diet, associated with inadequate intake of essential micronutrients.

Although foods made with multiple ingredients - cereals, legumes, and vegetables - already exist, they are tailored to low-income, malnourished children and women.

Under CIAT's overall coordination, partners will report to the project through PABRA All partners have longstanding experience in working with farmers and private sector partners as well as strong channels to local authorities and policy-shapers, which will play an important role in scaling out research results in PABRA's 30 member countries.

Note to editors:
"**Making Value Chains Work for Food and Nutrition Security of Vulnerable Populations in East Africa**' is supported by BMZ and GIZ, and is a Pan-Africa Bean Research Alliance initiative, under the BMZ One World No Hunger Initiative. The project will be led by the International Center for Tropical Agriculture, in collaboration with The University of Hohenheim (UHOH), the University of Göttingen (UGOE), the Kenya Agriculture and Livestock Research Organization (KALRO) and Ugandan Nutrition and Agriculture Research Organization (NARO). The project will be executed by the International Center for Tropical Agriculture (CIAT) in collaboration with the Kenya Agricultural and Livestock Research Organization (KALRO), the National Agricultural Research Organization (NARO) in Uganda, and the Pan-Africa Bean Research Alliance (PABRA).

PABRA: