

RNRRS Outputs Accessed Into Use in by RIU-Nigeria Programme June – September 2009

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Cowpea-Soybean Value Chain Innovation Platform

RNRRS OUTPUT CPP28 AND CPP66: IMPROVED DUAL-PURPOSE COWPEA VARIETIES

As a follow up to the need analysis and subsequent capacity building on appropriate agronomic practices for optimum yield of cowpea and soybeans conducted at the platform meetings, RIU–N in collaboration with seed producing companies: the IAR-ABU, Seed Project Ltd and the IITA, facilitated the adoption of improved cowpea seed varieties by three thousand farmers in Kaduna and Kano states. One hundred of the adopters were members of the RIU-assisted Cowpea-Soybean IP. The adopted cowpea varieties included IT277-2 (dual purpose, medium maturing: i.e. high yielding and high forage potential); IT97K-499-35 (high yielding *striga*-resistant, medium maturing) and IT98K-205-8 (high forage potential, *striga* resistant).

The rapid multiplication of *Striga* on cultivated farmlands has resulted in a serious decrease in yields (both cereals and legumes) often, farmers are forced to move further from their homesteads to farm. These *striga* resistant varieties therefore, offer opportunity for farmers to reclaim their abundant farmlands. The dual purpose nature of the varieties offers potential for the leafy residue to provide feed for livestock during the dry season when forage is in short supply and livestock owners experience poor livestock performance and mortality with attendant loss of income. These varieties offer an opportunity for crop/livestock integration a frame work necessary for the sustainability of our rural farming system. Successful adoption of these varieties should stem huge losses incurred by farmers due to *striga hermonthica*, increased efficiency of production and raise the profitability of the farms and the farmers' incomes. Good performance of adopter-farms should spur keen interest and demand for these RNRRS outputs among other farmers in the target localities, in subsequent planting seasons.

RNRRS Output CPH28: SOLARISATION AND TRIPLE BAGGING OF COWPEA

A one day capacity building Crop Livestock Innovation Platform training was held in Kano on 25 June 2009. Participants at the training included Cowpea and Soybean farmers from Kano and Kaduna States, Certified Seed Producers, Companies, Input dealers, NGOs , Oil Millers, Feed Millers and Financial Institutions. Capacity was built on proper storage technique for cowpea.

One hundred and fifty (150) cowpea farmers, including forty-five IP members, took part in the one day training event, during which the use of post-harvest 'solarisation and triple bagging' storage technique was explained and demonstrated to the farmers. Hundreds of farmers who adopted the storage technique placed orders for the bags from the bag-making company which collaborates with the International Institute of Tropical Agriculture (IITA) - Nigeria. Nigeria is the largest producer of cowpea in Africa. Post –harvest losses of cowpea during storage has been a major challenge to farmers where losses of between 50 to 60 percent have been recorded. This has lead to a serious loss of income to the farmers,

poor nutritional value of the beans when consumed and a general decline in livelihood of the farmers whose main activity is cowpea production. Solarisation raises the temperature of the beans and help kill most if not all the pest –eggs, larvae and adult. Solarisation and triple bagging technique preserves stored cowpea from severe damage by bruchid beetles (*Callosobruchus maculatus*) thereby ensuring quality product with greater income to farmers. This technology when out scaled will improve the income of millions of people and reduce malnutrition.

RIU- N facilitated this uptake through collaboration with the Institute of Agricultural Research, Ahmadu Bello University, Zaria (IAR-ABU), the Lela Agro Industry Ltd which produces the bags, the IITA, Nigeria Stored Products Research Institute (NISPRI), and the Agricultural Development Projects (ADPs) for both Kaduna and Kano states.

TGX1835 –10E: RUST RESISTANT SOYBEAN VARIETY

NARS OUTPUT: RUST RESISTANT SOYBEAN

Following the first Cowpea/Soybean Crop livestock integration innovation value chain platform meeting held in Kano on 25 June 2009 in which capacity was built on management practices for optimum cowpea/Soybean yield, three thousand farmers belonging to farmer’s associations and Non Governmental Organizations in Kaduna State indicated interest to obtain the Rust Resistant Soybean (TGX1835 – 10E) variety. This variety was available through the collaboration of Institute of Agricultural Research, Ahmadu Bello University Zaria (IAR-ABU), International Institute for Tropical Agriculture (IITA) and The Seed Project Company Ltd all members of the IP. Rust is a major disease affecting soybean particularly in the Guinea Savannah Zone of the country (due to high rain fall) the main soybean production zone. The variety (TGX1835 – 10E) was developed by IITA /IAR as a rust resistant high yielding variety to enable soybean production in wider areas of the country with optimum yield. Successful out scaling of this variety will lead to an extension of the soybean Agro- ecological Zone, increase in farmers yield and income and an overall improvement in livelihood.

TGX1835- 10E certified Soybean Seed was purchased by the groups/associations. RIU facilitated the distribution of the seeds to individual farmers. Distribution was carried out in three locations: UBA Office Kasuwan Barchi, Farmer’s House Sabon Tasha and Kasuwan Magani Primary School at Kasuwan Magani Farmer’s farm size ranged from 0.5 to 4ha. Seeds were dressed and packaged in 2.00kg bags. Farmers with 0.5 -1.0ha got 6kg of seeds while those with farm size above 1.5ha got 10kg of seeds.

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