



Dr Nwanze appreciating the Green SIM-powered phablet (phone + tablet), designed especially for smallholder farmers.

sorghum varieties that are high-yielding and adapted to both biotic and abiotic stresses in Eastern Kenya and northern and central Tanzania. It is strengthening extension support for the promotion and distribution of quality seeds of improved varieties and in improving market linkages. It is also addressing constraints along the value chain in order to increase production, productivity and incomes. Farmers are benefiting from capacity building, access to quality seeds and linkage to markets.

Recently concluded projects

Enhancing productivity of groundnut and pigeonpea cropping systems in Tanzania and Uganda.

The ultimate goal of the project is to improve the food sufficiency and income generation of smallholder farmers in Tanzania and Uganda through targeted agricultural research for development that promotes pro-poor agricultural and rural innovations. The results of the project will deliver improved food security to over 40,000 smallholder households (the target beneficiaries). The expected benefits/impacts include: improved

groundnut/pigeonpea productivity and production; better nutrition/health, and income; improved soil fertility and enhancement of the natural resource base; more efficient and accessible markets for smallholder farmers; and improved local capacity to continue addressing constraints to legume production and productivity.

Increasing food security and household income through small stock market development in Zimbabwe (2010 Incremental EC Contribution to CGIAR).

The project contributed in increasing food security and incomes of smallholder farmers by enhancing the livestock sector through efficient market systems.

Improving farmer livelihoods and food security through enhanced legume productivity in India and Myanmar (2010 Incremental EC Contribution to CGIAR).

The project initiated and scaled up seed production in locations across India and Myanmar to facilitate demand.

Dr Kanayo Nwanze and ICRISAT

ICRISAT is proud of its connection with Dr Kanayo Nwanze, the President of IFAD. Dr Nwanze was a Principal Scientist (Entomology) at ICRISAT from August 1979 to November 1996.

ICRISAT honored Dr Nwanze with a Special Award as “an outstanding scientist, a global leader in agricultural research for development, and a global champion for smallholder agriculture.” The recognition was received by Dr Nwanze on behalf of IFAD.

Conclusion

IFAD’s assistance has made a marked difference in the war ICRISAT wages against hunger and poverty.

Thousands of SAT farmers have learnt to practise safer, more efficient agriculture, thus making their struggle against erratic nature easier. This partnership has given them new hope and an unshakeable belief in a better future. The faith of these millions of poor in the semi-arid tropics needs to be sustained, in order to fulfil the promise of Science with a Human Face.



IFAD and ICRISAT

For Greater Agrarian Growth



Dr Kanayo Nwanze interacting with members of a women's self-help group, at the Adarsha watershed in Kothapally, Telengana, India.

Introduction

The International Fund for Agricultural Development (IFAD) and ICRISAT have been working together for decades and share similar goals. Both aim to eliminate poverty, hunger and malnutrition, and to raise productivity and incomes of poor marginal farmers in the semi-arid tropics. ICRISAT has benefited from the generous increase of IFAD support in its priority areas of agriculture and rural development in the Asia and Africa regions. IFAD and ICRISAT share identical research priorities – enhancing agricultural productivity and competitiveness, rural enterprise development and diversification, and improving livelihood opportunities for communities in semi-arid tropical areas, where better resource management and new technologies will help reduce poverty.

ICRISAT serves as a catalyst in IFAD’s renewed focus on seed multiplication and distribution networks, land and water management, and agricultural services support and markets, in the semi-arid tropics (SAT) of sub-Saharan Africa and Asia. Supported with funds from IFAD and several others, ICRISAT has been able to help thousands of farmers move from poverty to prosperity. Sustained assistance from IFAD thus enables ICRISAT to work resolutely, not only in established fields such as crop improvement and pest control, but also in newer areas, such as biofuel R&D, as well as economic and knowledge empowerment of poor farmers.



International Crops Research Institute
for the Semi-Arid Tropics



ICRISAT is a member
of the CGIAR Consortium

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid tropics have over 2 billion people, of whom 644 million are the poorest of the poor. ICRISAT innovations help the dryland poor move from poverty to prosperity by harnessing markets while managing risks – a strategy called Inclusive Market-Oriented Development (IMOD).

ICRISAT is headquartered in Patancheru near Hyderabad, Telangana, India, with two regional hubs and six country offices in sub-Saharan Africa. It is a member of the CGIAR Consortium. CGIAR is a global research partnership for a food secure future.

ICRISAT-India
(Headquarters)

ICRISAT-Liaison Office
New Delhi

ICRISAT-Ethiopia

ICRISAT-Kenya
(Regional hub ESA)

ICRISAT-Malawi

ICRISAT-Mali
(Regional hub WCA)

ICRISAT-Niger

ICRISAT-Nigeria

ICRISAT-Zimbabwe

ICRISAT-Mozambique

About ICRISAT: www.icrisat.org

ICRISAT’s scientific information: <http://EXPLORE/it.icrisat.org>



International Crops Research Institute
for the Semi-Arid Tropics





Groundnut seed production in Vietnam.



Training of women farmers in Nepal.



A supervision mission designated by IFAD visiting pigeonpea trials in Sehore, Madhya Pradesh.



IFAD President Dr Kanayo Nwanze visiting ICRISAT Niger.

IFAD-funded current projects

Sustainable Management of Crop-based Production Systems for Raising Agricultural Productivity in Rainfed Asia aims at improving the well-being of poor rural women and men engaged in rainfed agriculture in India, Lao PDR, Nepal and Vietnam through sustainable, enhanced productivity and diversified income-generating opportunities.

The project seeks to transform existing low-productivity rainfed cropping systems in the target regions into resilient productive cropping systems through research and development. This transformation can be achieved by deploying appropriate farmer-friendly technological innovations, providing technical support services to project partners, and enhancing their capacities and expertise to support agricultural development in the SAT. While promoting inclusive market-oriented development in rainfed agriculture, the project empowers smallholder farmers and their families to sustain resilient, productive rainfed cropping systems besides helping them harness diverse income-generating opportunities.

Poor and marginal farmers engaged in rainfed agriculture in India (Jharkhand, Madhya Pradesh and Rajasthan), Laos (northern and southern areas), Nepal (western mid-level hills region) and Vietnam (Ha Tinh and Cao Bang provinces) are being empowered to adopt project-generated innovations and technologies. Legumes considered for interventions include groundnut, pigeonpea, chickpea, mungbean, lentil, field pea and cluster bean in India; groundnut, soybean and mungbean in Laos and Vietnam; and groundnut, pigeonpea, soybean, lentil and phaseolus bean in Nepal.

Main activities undertaken

- Identification and agro-ecological characterization of key sites, their existing crop production systems, and the roles of men and women in those systems;
- Identification of potential areas of intervention in the

major cropping systems to enhance their resilience, productivity and gender sensitivity;

- Identification of one or two resilient productive cropping systems in each rainfed agro-ecology;
- Technical support to women and men in communities and NARS partners, including IFAD loan projects through (i) improved drought forecasting based on the assessment of micro-level drought vulnerability; (ii) crop diversification strategies; (iii) appropriate, cost-effective integrated crop management practices in the context of gender-based roles, responsibilities and preferences; and (iv) seed support, to ensure seed sufficiency of farmer-preferred varieties at the local/community level;
- Devising strategies for scaling out (through linkages with IFAD loan projects) and scaling up (through integration with other development programs and extension services);
- Setting up appropriate seed production business models, including community-based seed production systems;
- Establishing linkages between smallholder farmers and markets through value addition at the local level;
- Special attention to women's participation in decisions on the choice of crops and crop varieties, input and output marketing and household food management.
- Knowledge empowerment.

Major achievements during 2012-2014

India

- 460 farmers were trained in improved legume production technologies.
- 367 farmers (212 women) were trained in IPM, vermicomposting, value addition, and production practices.
- 19.2 metric tons of breeder seed of improved varieties of chickpea, pigeonpea, and lentil was produced.

Lao PDR

- 150 farmers (including 50 women) were trained in improved crop production technologies.
- 10 metric tons of seed of groundnut variety Thainan-9 was supplied to 83 farmers (of which 14 were women). These farmers earned 1.3 billion kips by selling 100 metric ton of groundnut.

Nepal

- 131 farmers (including 72 women) were provided training on improved cultivation practices and 130 farmers (including 75 women) on seed production and value addition.
- 204 women and 174 men farmers were selected in 18 groups for taking up bean cultivation.
- The micronutrient-rich lentil lines (RL-6, RL-13, and ILL-3738) were promoted among farmers. Community-based seed production (CBSP) was undertaken for bean, pigeonpea, groundnut, soybean, chickpea and lentil.

Vietnam

- 1023 farmers (including 497 women) were trained in seed production, processing and storage.
- 24 metric tons of seed of groundnut varieties (L23 and L26) and 7 metric tons of seed of soybean variety DVN14 were produced by research stations.
- Over 500 metric tons of seed was produced by farmers trained in seed production. Seed production in farmers' fields: By the end of the season, 2.4 tons of DH208, 1.3 tons of DX17, 5 tons of DT26, 525 tons of L14 and L23, and 5 tons of DT26 seed were produced.

Enhancing Productivity of Groundnut and Pigeonpea Cropping Systems in Eastern Africa (2011 EC Contribution) is aimed at improving food security through increased productivity by supporting the development, evaluation, and dissemination of new improved and well-adapted groundnut and pigeonpea varieties to the

selected semi-arid agro-ecologies in Tanzania and Uganda. Twenty-two promising pigeonpea varieties/genotypes and 48 groundnut varieties were evaluated at multi-locations and five superior pigeonpea and three groundnut varieties in Tanzania and four pigeonpea and five groundnut varieties in Uganda were identified having farmer and market preferred traits. These are being used in the seed production chain and varietal demonstrations.

Under the project, 100 pigeonpea and 115 groundnut varietal demonstrations were conducted involving best-bet varieties to demonstrate the benefits of Integrated Crop Management (ICM) practices including timely planting, optimum spacing and Integrated Pest and Disease Management (IPDM).

Main activities undertaken:

- 43 Farmer Research Groups (FRGs) are being involved as an effective community-based seed production and delivery mechanism.
- Seed companies such as Pearl, Equator, Victoria, East African seeds, FICA in Uganda, and Kilimo markets and Zenobia seeds in Tanzania are involved in quality seed production of pigeonpea and chickpea.
- Two value chain studies on pigeonpea in Southern Tanzania and groundnut in Uganda were conducted. A value chain performance enhancement chart is under preparation to show how to engage various stakeholders including policymakers at various levels.

Development of a robust commercially sustainable sorghum for multiple uses (SMU) value chain in Kenya and Tanzania (2011 EC Contribution)

ICRISAT along with partners in Kenya and Tanzania is working towards improving the livelihoods of resource-poor, smallholder farming households in rural areas in both countries by developing sorghum varieties and their value chain for multiple uses. The project is supporting the development and demonstration of new multi-purpose