

Fruitful beginnings

A long time champion of poor farmers in the semi-arid or dry tropics (SAT) of Asia and sub-Saharan Africa (SSA), ICRISAT recognizes the need to include high value commodities and products in its research for development agenda. This is consistent with the CGIAR's new research priority (3A) on reducing rural poverty through agriculture diversification and emerging opportunities for high value commodities and products.

ICRISAT's comparative advantage in this arena lies in being "on the spot" in the semi-arid countries of SSA and Asia. This is where the poor live, and fortuitously, this is where a diverse range of fruit and vegetables can be cultivated, improved, and marketed.

Over the last three decades ICRISAT and partners have been refining techniques to rejuvenate degraded soils, improve water use efficiency, and develop drought and heat tolerant crops. This expertise is vastly applicable to horticulture, and is in harmony with the objectives of the Harvest Plus Challenge Program.

High value crops not only provide for higher incomes; they can become instruments for delivering better nutrition. Keeping this in view, and following its Governing Board decision in 2002, ICRISAT started an intensive program in Niger on fruit trees for the SAT. By August 2006 ICRISAT-Niger had become the custodian of 131 accessions of fruit trees, the largest available worldwide collection of fruit tree germplasm adapted to adverse climatic conditions of the dry tropics.



Ziziphus mauritiana or Pomme du Sahel is loaded with vitamin C

Degraded lands abound in the semi-arid tropics of Asia and sub-Saharan Africa. Rehabilitating them with drought-tolerant hardy trees, which can also be commercially profitable, is possible. Extra-hardy annuals such as leafy vegetables, and medicinal and forage plants are planted between the trees to provide quick income.



Tribals sell Pongamia seedlings to earn extra income.

In cooperation with local juice factories and other private sector entrepreneurs, ICRISAT is also starting a program for the domestication of various fruit trees for high quality juice production.

ICRISAT is also trying to fill the gap in the bio-diesel industry that faces insufficient supply of raw material by promoting the cultivation of *Pongamia* and *Jatropha* trees. The vast wasteland areas in India can be made available to local communities for cultivation of these hardy bio-diesel crops.

Benefits to farmers can be sustained only if there is sufficient research and information transfer on good agricultural practices. ICRISAT is partnering with other CGIAR centers and the Asian Vegetable Research and Development Center to address this CGIAR priority, which will provide dryland farmers with opportunities to earn additional income, increase their enterprise stability, and produce bio-fortified and nutrition packed diets through fruits and vegetables.

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