Seed imports raise hopes of Afghan recovery

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An international research consortium is taking a crucial first step in reviving the war-ravaged farms of Afghanistan by replenishing the country's seed stocks.

Led by the International Center for Agricultural Research in the Dry Areas (ICARDA), based in Aleppo, Syria, and involving the Afghan government as well as relief organizations, the consortium has already delivered 3,500 tonnes of wheat seed to almost 70,000 farmers in 11 provinces of Afghanistan in time for spring planting.

Three years of drought and more than 20 years of war have severely disrupted the country's agricultural system, and left seed stocks badly depleted. With two-thirds of Afghanistan's 26 million people living off the land, the success of the harvest is seen as fundamental to the stability and recovery of the nation. Restocking seed — especially wheat, which makes up 80% of the nation's grain production — is Afghanistan's first step on the path back to agricultural self-sufficiency.

"We need to ensure that these critical seeds survive," says Mohamed Sharif, deputy minister of agriculture of the Afghan Interim Administration. "Placing science at the forefront of our efforts will make this possible."

The revival effort is being funded by \$12 million in aid from the United States and Canada, and is orchestrated by Future Harvest, a network of 16 agricultural research centres, including ICARDA, that is supported worldwide by the Consultative Group on International Agricultural Research.

The consortium has used satellite imagery and soil maps to identify upland areas of the country that have sufficient soil moisture to stand a chance of yielding a rich harvest. It is installing new meteorological stations, called Agromet stations, to provide updates on ground conditions during the growing season. Each station measures moisture, soil temperature at three depths, and wind speed, and transmits the information via satellite to project administrators at Afghanistan's agriculture ministry and researchers at a new ICARDA office in Kabul.

Afghanistan is a diverse country in which knowledge of local agricultural conditions will be critical to the project's success, its participants say. But even under the Taliban regime, an extensive network of farmers kept working with local and international non-governmental organizations on seed trials. So the seed provided by the consortium includes drought-tolerant varieties that are known to be suited to local conditions.

The consortium has rushed the first supplies of improved seed into the country in time for the spring planting, so it can be grown and multiplied in time for a second planting in the autumn, when most of

Afghanistan's harvest is grown, says John Dodds, a Washington representative of ICARDA. A further 60 tonnes of seed has been distributed to refugees passing through Kabul on their way home to remote parts of the country.

Farmers who buy the seed will receive guaranteed payments from the consortium for the spring harvest. The seed produced will be tested locally for quality and then redistributed before being sown in the autumn, along with a further 10,000 tonnes of imported seed — including some of the 2,000-plus indigenous Afghan seed varieties of wheat, barley and pulses that are already held by ICARDA.

"Satellite imagery and Agromet technology have been used before for relief efforts, but never on this scale," says Adel El-Beltagy, director general of ICARDA. The data generated will indicate which regions of the country will need food aid and, conversely, where aid supplies should be cut back. The challenge, Dodds says, is to phase out food aid so that it doesn't take the market away from farmers by depressing the price of locally produced grain.

The consortium is also comparing old satellite pictures of Afghanistan with new ones to assess damage to the country's once-extensive irrigation system. Traditional irrigation channels can be rebuilt at moderate cost, project officials say, but Soviet-built irrigation channels of half-open concrete piping will have to be abandoned and replaced.

Afghanistan was traditionally self-sufficient in food and had a strong agricultural research base, including an extensive crop gene-bank that operated until 1992. The consortium aims to supply 125,000 tonnes of seed over the next three years, and hopes that the nation will be self-sufficient again by 2007. This is a realistic goal, according to Dodds: "The consortium has a vision, but its feet are firmly on the ground."

Growth factor: seed imports to 11 provinces will help Afghanistan's farmers to become self-sufficient.