

of these employees paid \$4,104 in federal individual income taxes, this amounts to a total return of \$2.7 million to the U.S. Treasury in 1992. This total is more than half the 1992 ERIP appropriations.

Additional tax revenues are associated with royalty payments on ERIP inventions, corporate income taxes, state and local sales and income taxes, and personal income taxes paid by indirect employment beneficiaries of the program.

5.3 FOREIGN SALES OF ERIP TECHNOLOGIES

Information on foreign sales was not systematically collected in previous ERIP evaluations. Previous evaluations did collect data on foreign patents and identified significant activity, but the success of foreign marketing activities beyond patenting was never assessed. The 1993 survey was the first time inventors were asked to estimate the magnitude of their foreign sales.

Thirty of the respondents to the 1993 survey indicated that they have sold their ERIP technologies to customers in one or more foreign countries. This represents 23% of the 129 ERIP technologies with sales. Only 22 of these respondents estimated the magnitude of these sales. Half of these had foreign sales of less than \$100,000. The remaining 11 inventors had foreign sales that ranged from \$100,000 to \$15,000,000. Altogether, foreign sales for these ERIP technologies totalled \$19.2 million (in current dollars).

The experience of one inventor who has successfully tapped several foreign markets is described in the attached sidebar.

One ERIP participant, Karakian Bedrosian, is involved in a project in Morocco, sponsored by the U.S. Agency for International Development (AID) and the World Bank, designed to improve the quality of agricultural exports from Morocco. Four hundred million pounds of refrigerated tomatoes are shipped from Morocco to Europe annually. The cost of shipping these tomatoes currently is about \$5,000 per container, including the cost of returning the empty refrigeration system back to Morocco. Nature Pak (Bedrosian's Company) may be able to reduce this cost to \$2,500 if it can ship the produce in unrefrigerated, insulated vessels, or to as little as \$1,500 if the vegetables can be shipped unrefrigerated and uninsulated. In addition, tomatoes can be vine ripened before shipping, which improves their taste and market value.

Bedrosian has an industrial partner in Morocco who is a tomato grower, shipper, and agricultural supply dealer. The partner will supply the tomatoes and arrange the shipping, while Bedrosian will supply the equipment and materials for 25 test shipments. After a 90-day trial, Bedrosian and his partner will evaluate whether they should develop an ongoing business relationship.

Test shipments between Morocco and France using unrefrigerated but insulated shipping containers were conducted in late 1993. Temperature probes within the pallets recorded temperatures ranging from 58-60° F, while outside temperatures varied from 45-65° F. The produce arrived with excellent results. Bedrosian is currently conducting tests using uninsulated containers to further reduce transportation costs. If successful, this system may make it feasible for Moroccan tomato growers to enter markets as far away as Canada.

The Nature Pak system has been used to ship many types of fruits and vegetables. In trial shipments, raspberries shipped from Chile to the U.S. arrived in excellent condition and at one-third to one-fifth the cost of refrigerated shipping.